



PLANTS OF
THE FALKLAND ISLANDS



E. F. VALLENTIN





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PLANTS OF THE FALKLAND ISLANDS

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ILLUSTRATIONS
OF THE
FLOWERING PLANTS
AND FERNS
OF
THE FALKLAND ISLANDS

BY
MRS. E. F. VALLENTIN

WITH DESCRIPTIONS BY
MRS. E. M. COTTON



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PUBLISHERS' NOTE

THE drawings from which the plates in this volume have been prepared were made by Mrs. Vallentin after a visit to England, during which she interested herself in the study of botany and received valuable aid in the examination and drawing of plants from Miss Matilda Smith, of the Royal Botanic Gardens, Kew. On her return to the Falkland Islands she began to make drawings from the living plants growing in the Islands with a view to the preparation of an illustrated flora of her native land. The work, however, was interrupted by a serious breakdown in health; and when it became evident that its resumption must be indefinitely postponed, her husband decided to issue the present volume from such materials as were already available. He entrusted the arrangement of the drawings to Miss Smith and the descriptions to Mrs. Cotton.

Mrs. Cotton desires to acknowledge her indebtedness to the following works for much information:—"Flora Antarctica," by Sir Joseph D. Hooker; "Flora of the Falkland Islands," by C. H. Wright (in the *Journal of the Linnean Society*, Vol. xxxix); and "A Botanical Survey of the Falkland Islands," by Carl Skottsberg.

The order of arrangement follows closely that adopted in British floras and herbaria, and as the series includes examples of most of the natural orders of flowering plants and ferns found in the Islands, the work may not only be of interest to those who desire to identify the plants more commonly met with, but also to some who may be tempted to enter upon a more systematic examination and arrangement of allied species.

Briefly, the plants are arranged under three main classes as follows :—

CLASS I.—Plants which begin to grow from seeds by sending up *two* very simple leaves called cotyledons, and which therefore are called DICOTYLEDONS. As full-grown plants they may usually be recognised by having mature leaves with branched or net-like veins, and flowers with their parts not in threes or multiples of three.

This class is represented in plates 1-52, grouped as follows :—

1-23—in which the petals are separate, not united, called Polypetalæ;

24-48—in which the petals are more or less united, some in a tube, others only near the base, called Monopetalæ;

49-52—in which the flowers are incomplete, INCOMPLETÆ.

CLASS II.—Plants which begin to grow from seeds by sending up one very simple leaf ‘cotyledon,’ and which are called MONOCOTYLEDONS. As full-grown plants they may usually be recognised by having mature leaves with parallel veins, and flowers with their parts in threes or multiples of three; represented in plates 53-58.

CLASS III.—Plants without true flowers and seeds, of which only ferns are included in this book; represented in plates 59-64.

Within these classes and their subdivisions are arranged the Families of plants; and these again are divided into Genera and Species. The botanical name of a plant is that of its genus and species. In the following Table of Contents the more important analytical characters which determine their arrangement have been added.

ANALYTICAL TABLE OF CONTENTS

CLASS I

DICOTYLEDONS

PLATE

Leaves net-veined; parts of the flower not in multiples of 3.
(Plates 1-52.)

Division 1. Petals separate. POLYPETALÆ. (Plates 1-23.)

(a) *Petals and Stamens inserted under the Ovary.* (Plates 1-15.)

Ranunculaceæ:—Petals definite in number. Stamens indefinite. Ovary of several carpels.

RANUNCULUS BITERNATUS	1
— MACLOVIANUS	2
— HYDROPHILUS	3
— TRULLIFOLIUS	4
HAMADRYAS ARGENTEA	5
CALTHA SAGITTATA	6

Cruciferae:—Sepals 4. Petals 4. Stamens 6.

ARABIS MACLOVIANA	7
DRABA FUNICULOSA	8

	PLATE	
DRABA FALKLANDICA	10	
CARDAMINE HIRSUTA	8	
COCHLEARIA OFFICINALIS	9	
Violaceæ:—Stamens 5, the anthers placed on the inner face of short, broad filaments. Fruit a capsule, 3-valved.		
VIOLA MACULATA	11	
Caryophyllaceæ:—Leaves opposite, entire. Flowers regular. Stamens definite. Fruit a capsule, 1-celled. Stem often swollen at the nodes.		
STELLARIA MEDIA	12	
SPERGULARIA MEDIA	13	
CERASTIUM ARVENSE	14	
Geraniaceæ:—Petals twisted or imbricate in the bud. Stamens 10.		
OXALIS ENNEAPHYLLA	15	
(b) <i>Stamens situated round or upon the Ovary. (Plates 16–23.)</i>		
Rosaceæ:—Flowers regular. Stamens indefinite. Re- ceptacle generally hollowed. Leaves alternate, stipulate.		
RUBUS GEOIDES	16	
ACÆNA ASCENDENS	17	
— LUCIDA	18	
Droseraceæ:—Insectivorous herbs with radical leaves covered with glandular hairs. Flowers regular, 4–5 merous. Fruit a loculicidal capsule.		
DROSERA UNIFLORA	18	

Haloragaceæ:—Aquatic herbs, with very small, often unisexual flowers. Calyx lobes and petals 4, 2 or none. Stamens definite. Ovary inferior. Styles distinct.	
GUNNERA MAGELLANICA	19
Myrtaceæ:—Leaves opposite, evergreen. Flowers regular. Sepals and petals 4 or 5. Stamens indefinite. Receptacle more or less hollow.	
MYRTEOLA NUMMULARIA	20
Crassulaceæ:—Leaves succulent. Petals, sepals and carpels the same in number. Carpels free.	
TILLÆA MOSCHATA	21
Umbelliferæ:—Leaves alternate. Flower head an umbel. Fruit dry.	
AZORELLA FILAMENTOSA	21
— RANUNCULUS	22
— CÆSPITOSA	22
CRANTZIA LINEATA	23

Division 2. Petals united. MONOPETALÆ. (Plates 24–48.)

(a) *Ovary inferior. Corolla bearing the Stamens.*

Rubiaceæ:—Stipules resemble leaves and form whorls with them round the stem. Ovary 2-celled, 1 ovule in each.	
NERTERA DEPRESSA	24
GALIUM ANTARCTICUM	25
Valerianaceæ:—Corolla 5-lobed. Stamens 1–4. Anthers introrse.	
VALERIANA SEDIFOLIA	26

Compositæ. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

NASSAUVIA GAUDICHAUDII	27
— SERPENS	27
SENECIO FALKLANDICUS	28
— LITTORALIS	29
— CANDICANS	30
GNAPHALIUM AFFINE	31
— PURPUREUM	32
ASTER VAHLII	31
CHILIOTRICHUM DIFFUSUM	33
ERIGERON INCERTUS	34
BACCHARIS MAGELLANICA	35
LEUCERIA GOSSYPINA	36
PEREZIA RECURVATA	37

Stamens epigynous.

Campanulaceæ :—Leaves alternate. Stamens as many as corolla lobes. Sepals 5. Petals 5. Ovary multilocular.

PRATIA REPENS	38
-------------------------	----

(b) *Ovary superior.*

Ericaceæ :—Shrubs. Stamens usually twice as many as corolla lobes. Anthers opening by pores.

PERNETTYA PUMILA	39
GAULTHERIA MICROPHYLLA	40

Stamens epipetalous.

Primulaceæ :—Flowers pentamerous. Placenta free-central.

PRIMULA FARINOSA, var. MAGELLANICA	41
ANAGALLIS ALTERNIFOLIA, var. DENSIFOLIA	42

Plumbaginaceæ:—Leaves narrow, glandular. Flowers pentamerous. Calyx persistent.	
ARMERIA MACLOVIANA	43
Gentianaceæ:—Leaves opposite, entire. Corolla con- torted.	
GENTIANA MAGELLANICA	44
Scrophulariaceæ:—Flowers irregular. Stamens 2 or 4, if 4 in pairs. Ovary 2-celled.	
EUPHRASIA ANTARCTICA	45
CALCEOLARIA DARWINII	45
— FOTHERGILLII	46
VERONICA SERPYLLIFOLIA	47
— ELLIPTICA	48
Division 3. Flowers incomplete, usually with only 1 whorl of perianth or none. INCOMPLETÆ. (Plates 49–52.)	
Polygonaceæ:—Characterised by a peculiar sheathing stipule clasping the stem.	
POLYGONUM MARITIMUM, var. CHILENSE	49
Chenopodiaceæ:—Perianth small. Stamens opposite lobes. Ovary 1-celled, with 1 ovule or 2 or more styles. No stipules.	
CHENOPODIUM MACROSPERMUM	50
Empetraceæ:—Flowers unisexual. Sepals, petals and stamens 3.	
EMPETRUM RUBRUM	51
Santalaceæ:—Flowers sometimes unisexual. Perianth valvate. Ovary inferior, 1-celled, with 1–3 ovules.	
NANODEA MUSCOSA	52

CLASS II

MONOCOTYLEDONS

PLATE

Leaves with parallel veins. Parts of the flower in multiples of 3.
(Plates 53-58.)

Orchidaceæ:—Perianth very irregular. Anther 2-celled, combined with the style in an axial column.

CODONORCHIS LESSONII	53
CHLORÆA GAUDICHAUDII	54

Iridaceæ:—Perianth petaloid, united below into a tube.
Stamens 3.

SISYRINCHIUM FILIFOLIUM	55
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Liliaceæ:—Perianth regular. Ovary syncarpous, superior.

CALLIXENE MARGINATA	56
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Juncaceæ:—Perianth stiff or calyx-like, capsule 3-celled.

ROSTKOVIA GRANDIFLORA	57
— MAGELLANICA	57
JUNCUS SCHEUCHZERIODES	58

CLASS III

FILICES

Ferns, no true flowers. (Plates 59-64.)

CYSTOPTERIS FRAGILIS	59
POLYSTICHUM ADIANTIFORME	60
— MOHRIODES	61
BLECHNUM PENNA-MARINA	62
— TABULARE	63
GLEICHENIA CRYPTOCARPA	64

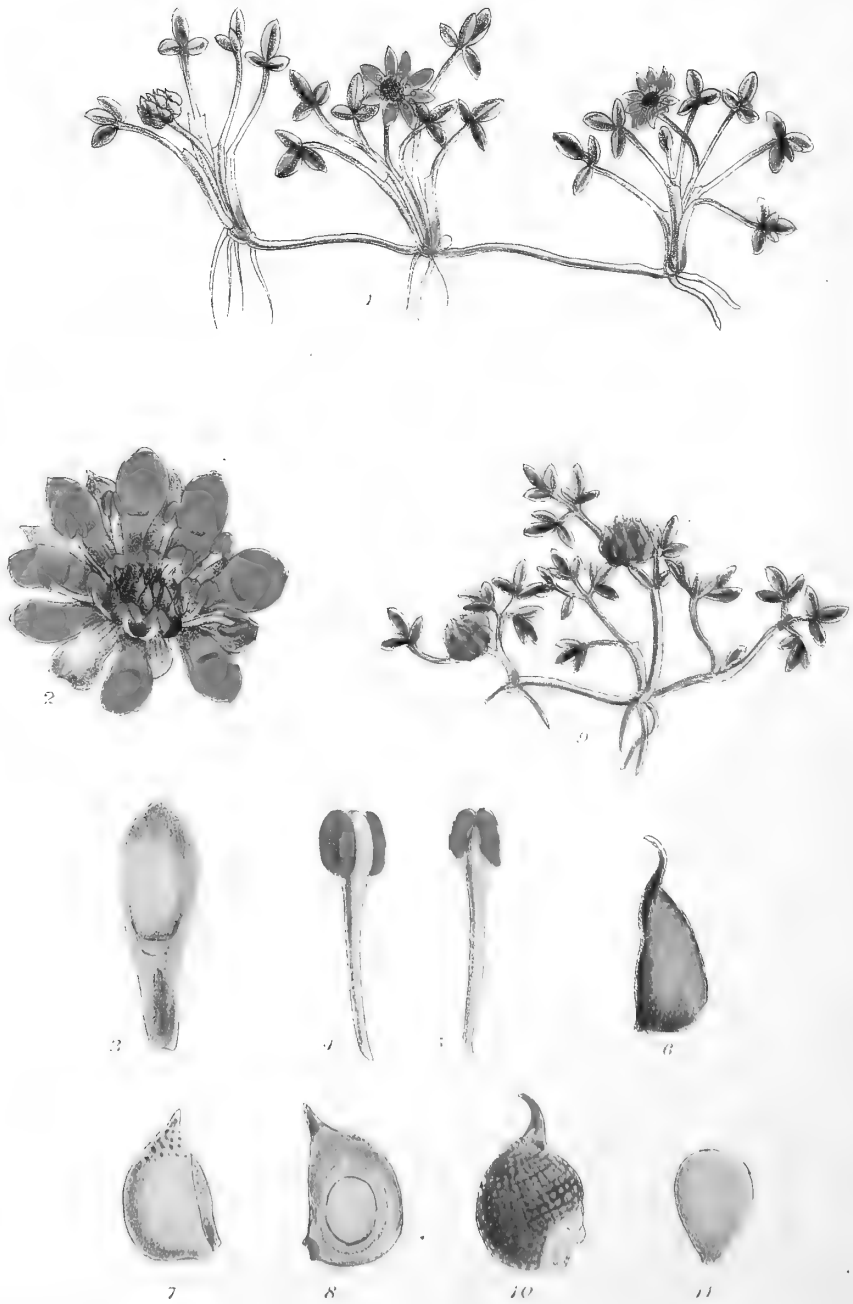


PLATE 1.

RANUNCULUS BITERNATUS.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, RANUNCULUS (*Crowfoot, Buttercup*) :—Herbaceous plants with regular, hermaphrodite flowers. Leaves entire or dissected, alternate. Sepals 5. Petals usually 5, with a honey gland or scale at the base. Stamens numerous. Carpels arranged to form a globular or oblong head, each with one seed, smooth or tubercular, terminating in a point or beak. Fruit, a collection (*Æterio*) of achenes.

Ranunculus biternatus, Sm. Plant about $1\frac{1}{2}$ in. high. Stem creeping. Leaves 3-lobed, and each lobe divided usually into 3. Sepals 5, ovate with rounded tips, brownish-green. Petals 5, spoon-shaped, yellow, with a honey gland at the base. Stamens 12–15, with green filaments. Carpels, about 20, ovate, brownish-green. Fruit, a dark red achene.

On marshy ground, also near the sea. Common.

Flowers November—January.

East and West Falklands.

This is rather a variable species in the size of its leaves and the number of its petals.

Description of plate :—1, whole plant in flower ; 2, flower ; 3, petal ; 4 and 5, stamens ; 6 and 7, carpels ; 8, section of carpel ; 9, plant in fruit ; 10, ripe fruit (achene) ; 11, seed. All except 1 and 9 enlarged.—



1. 1/2 in.

Ranunculus Maclovianus, Hook. f.

PLATE 2.

RANUNCULUS MACLOVIANUS.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, RANUNCULUS (*Crowfoot*, *Buttercup*) :—Herbaceous plants with regular, hermaphrodite flowers. Leaves entire or dissected, alternate. Sepals 5. Petals usually 5, with a honey gland or scale at the base. Stamens numerous. Carpels arranged to form a globular or oblong head, each with one seed, smooth or tubercular, terminating in a point or beak. Fruit, a collection (*Æterio*) of achenes.

Ranunculus Maclovianus, *d'Urv.* Plant about 5 in. high. Stem none or very short. Leaves nearly all springing from the root, with long leaf stalks, $\frac{3}{4}$ in. long, 1 in. wide, kidney-shaped, 3-lobed, the lobes being again divided into several pointed or rounded segments, covered with silky hairs. Sepals 5, ovate, with rounded tips. Petals 5, spoon-shaped, with a scale in middle, yellow. Carpels smooth or very slightly hairy.

Swamps. Fairly common, at least in the East Falklands. East and West Falklands.

Description of plate :—1, whole plant ; 2, flower ; 3, petal ; 4 and 5, stamens ; 6, carpel ; 7, ripe carpel ; 8, section of ripe carpel.

Errata :—On the plate, for *Hook. f.* read *d'Urv.*





RF / del. JRP hth.

Ranunculus hydrophilus, d'Urv.

PLATE 3.

RANUNCULUS HYDROPHILUS.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, RANUNCULUS (*Crowfoot*, *Buttercup*) :—Herbaceous plants with regular, hermaphrodite flowers. Leaves entire or dissected, alternate. Sepals 5. Petals usually 5, with a honey gland or scale at the base. Stamens numerous. Carpels arranged to form a globular or oblong head, each with one seed, smooth or tubercular, terminating in a point or beak. Fruit, a collection (*Æterio*) of achenes.

Ranunculus hydrophilus, *Gaud.* Plant varies in size according to habitat, in water it reaches a height of 4 in. Stem slender and creeping. Leaves entire, ovate, with long leaf stalks, sometimes submerged. Flowers small, on a short stalk. Sepals 5, ovate. Petals 5 or 6, shorter than the sepals, spoon-shaped, tapering to a narrow base, yellow, glandular pit comparatively large. Stamens 5. Carpels somewhat wrinkled, pale yellow.

In streams, pools, etc. Not common.

East Falklands.

Description of plate :—1, portion of plant ; 2, flower ; 3, section of flower ; 4 and 5, stamens ; 6, carpel ; 7, plant in fruit ; 8, ripe carpel (achene). All except 1 and 7 enlarged.

Errata :—On the plate, for *d'Urv.* read *Gaud.*

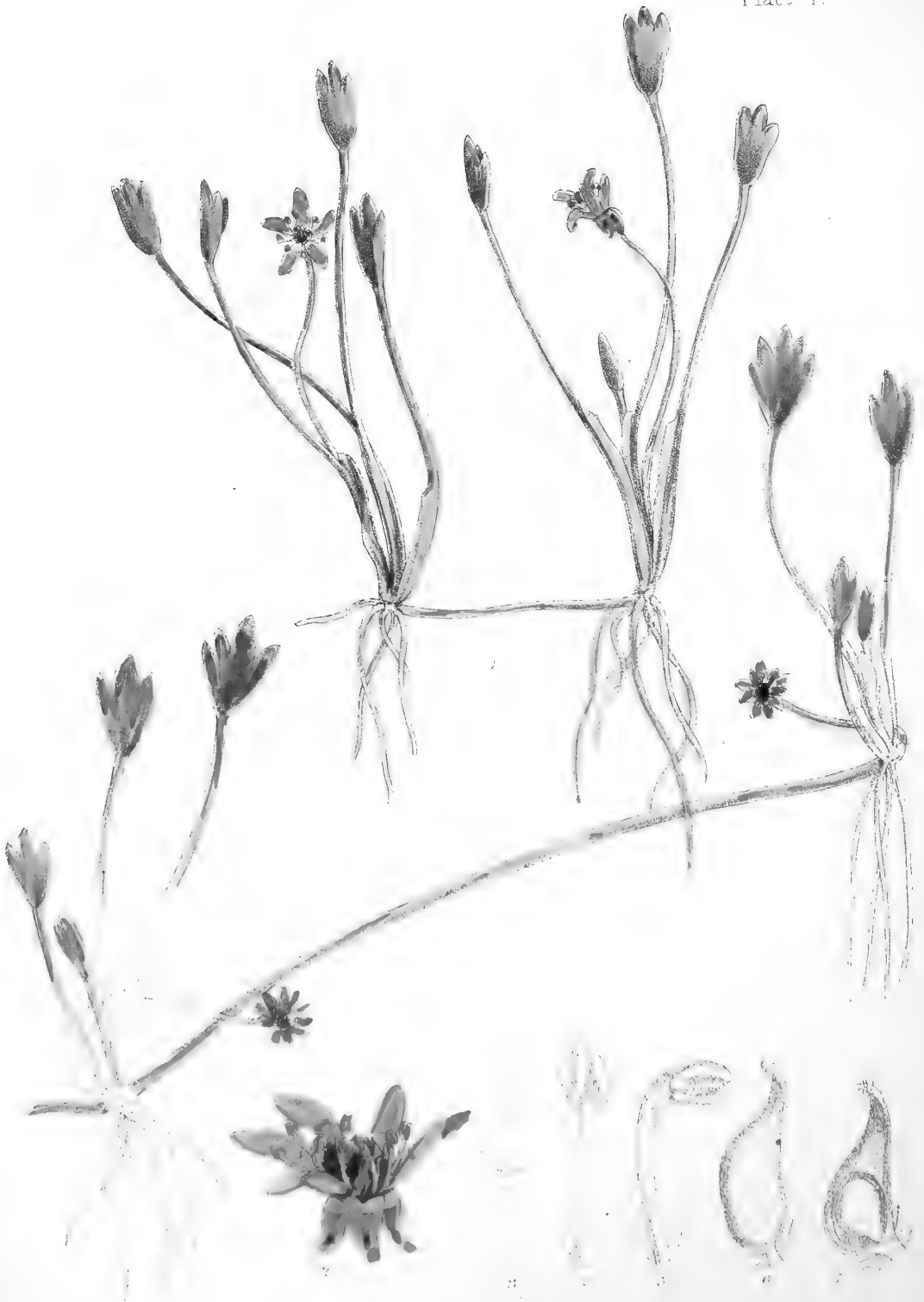


PLATE 4.

RANUNCULUS TRULLIFOLIUS.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, RANUNCULUS (*Crowfoot*, *Buttercup*) :—Herbaceous plants with regular, hermaphrodite flowers. Leaves entire or dissected, alternate. Sepals 5. Petals usually 5, with a honey gland or scale at the base. Stamens numerous. Carpels arranged to form a globular or oblong head, each with one seed, smooth or tubercular, terminating in a point or beak. Fruit, a collection (*Æterio*) of achenes.

Ranunculus trullifolius, *Hook. f.* Plant about 3 or 4 in. high. Stem creeping. Leaves with long leaf stalks 1–3 in. long, wedge-shaped, sharply truncated at apex which is broader than the base, irregularly 3–5-toothed, up to $\frac{3}{4}$ in. long, brownish-green. Flowers $\frac{1}{4}$ – $\frac{1}{2}$ in. across, singly placed on a long stalk. Sepals 5, reflexed, ovate with rounded apices. Petals 5, spoon-shaped, narrowing somewhat abruptly at base, glandular pit in middle, yellow. Stamens 9. Carpels 7.

In water, or on moist clay. Rare.

Flowers January.

East Falklands.

Description of plate :—1, plant; 2, flower; 3, petal; 4 and 5, stamens; 6, carpel; 7, section of carpel. All except 1 enlarged.



LEVdel. 1880

Hamadryas ardens (Hb. K.)

PLATE 5.

HAMADRYAS ARGENTEA.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, HAMADRYAS :—Herbaceous, perennial plants, similar to *Ranunculus* in habit but differing in having male and female flowers separate. Carpels numerous, 1-seeded.

Hamadryas argentea, *Hook. f.* (Silver-leaved ranunculus.) Plant about 8 in. high, densely woolly. Leaves radical, leaf stalk sheathing at base, $1\frac{1}{2}$ in. long, wedge-shaped, broadening towards apex, deeply divided into 3 segments, the segments being again divided into smaller obtuse lobes, whitish green, covered on both sides with shining white or golden hairs. Flowers $\frac{1}{2}$ in. across. Sepals 5 or 6, ovate, with pointed apices, hairy on outer side, greenish-brown or dull bronze. Petals 10–12, twice as long as sepals, long, narrow, gradually tapering to a pointed apex, base somewhat abruptly contracted, yellowish-brown, shining. Stamens 8. Carpels green, with yellow stigma.

On dry, grassy slopes near the sea, and on the top of mountains. Rare.

Flowers November and December.

West Falklands. Endemic.

Description of plate :—1, whole male plant ; 2, male flower ; 3, petal ; 4, stamen ; 5, female plant ; 6, female flower ; 7, carpel ; 8, section of carpel. All except 1 and 5 enlarged.





PLATE 6.

CALTHA SAGITTATA.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, CALTHA (*Marsh Marigold*) :—Herbaceous plants having annual stems springing from a perennial rootstock. Sepals about 5, large and usually coloured, petals being absent. Stamens numerous. Carpels 5–10, each containing several seeds.

Caltha sagittata, Cav. (Arrow-leaved Fig Marigold.)

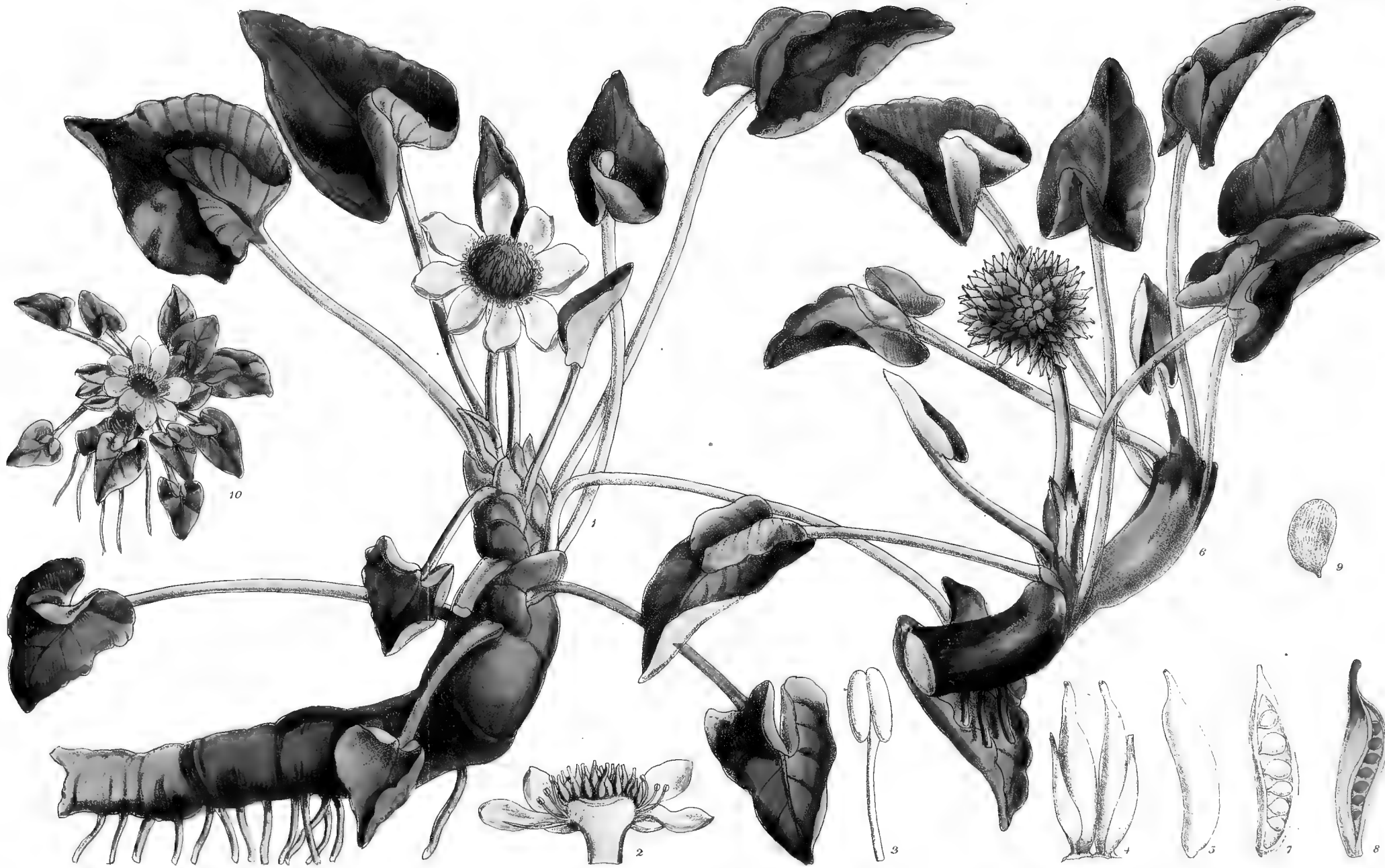
Plant varies greatly in size according to the moisture of the situation in which it grows. It forms thick, flat tufts on sand, while in water it is stout and tall. Roots fibrous and matted. Stem a creeping or erect rootstock, covered with sheathing bases of leaf stalks. Leaves variable in size, undivided, arrow-shaped, with curled margins, shining green and paler on the under side. Flowers 1–1½ in. in diameter, sometimes larger, possess a faint honey-like smell, but have no honey, flower stalk 1 in. to 1 ft. long, stout, erect, smooth, succulent. Perianth leaves 8–10, greenish-white or pale yellow. Carpels slightly hairy when young.

Swamps, streams, ponds and moist sand near the sea. Locally abundant.

Flowers November and December.

East and West Falklands.

Description of plate :—1, whole plant in flower ; 2, section of flower ; 3, stamen ; 4, carpels ; 5, section of carpel ; 6, plant in fruit ; 7, ripe carpel ; 8, seed ; 9, dwarf plant. All except 1, 6 and 9 enlarged.



EPV. del JNF lith

Caltha Sagittata, Cav.

PLATE 6.

CALTHA SAGITTATA.

Family, RANUNCULACEÆ :—Petals separate, definite in number. Stamens indefinite. Petals and stamens inserted under the ovary. Ovary of separate carpels.

Genus, CALTHA (*Marsh Marigold*) :—Herbaceous plants having annual stems springing from a perennial rootstock. Sepals about 5, large and usually coloured, petals being absent. Stamens numerous. Carpels 5–10, each containing several seeds.

Caltha sagittata, Cav. (Arrow-leaved Fig Marigold.)

Plant varies greatly in size according to the moisture of the situation in which it grows. It forms thick, flat tufts on sand, while in water it is stout and tall. Roots fibrous and matted. Stem a creeping or erect rootstock, covered with sheathing bases of leaf stalks. Leaves variable in size, undivided, arrow-shaped, with curled margins, shining green and paler on the under side. Flowers 1–1½ in. in diameter, sometimes larger, possess a faint honey-like smell, but have no honey, flower stalk 1 in. to 1 ft. long, stout, erect, smooth, succulent. Perianth leaves 8–10, greenish-white or pale yellow. Carpels slightly hairy when young.

Swamps, streams, ponds and moist sand near the sea. Locally abundant.

Flowers November and December.

East and West Falklands.

Description of plate :—1, whole plant in flower ; 2, section of flower ; 3, stamen ; 4, carpels ; 5, section of carpel ; 6, plant in fruit ; 7, ripe carpel ; 8, seed ; 9, dwarf plant. All except 1, 6 and 9 enlarged.





E. F. V. del. I. N. P. h. b.

Arabis Macloviana, Hook. f.

PLATE 7.

ARABIS MACLOVIANA.

Family, CRUCIFERÆ :—Sepals 4. Petals 4, separate, arranged in a cruciform manner. Stamens 6, of which two are shorter than the others. Ovary solitary, 2-celled. Fruit, a pod.

Genus, ARABIS (*Rockcress*) :—Annual or perennial herbs, usually erect, with a spreading tuft of radical leaves, the stem leaves undivided, with no leaf stalks or clasping the stem. Flowers usually white, occasionally purple. Fruit, a long, narrow pod.

Arabis Macloviana, *Hook.* Plant about 1 ft. high, glabrous. Leaves narrowly oblong, 1–2 in. long, the lower ones with long leaf stalks, upper ones sessile, edges serrated. Flowers arranged in dense heads. Sepals 4, hairy on outside, pale green with purple tips. Petals 4, white. Stamens 6, nearly same length, filaments pale mauve, anthers white with lilac borders. Ovary lilac-brown. Style pale green with yellow stigma.

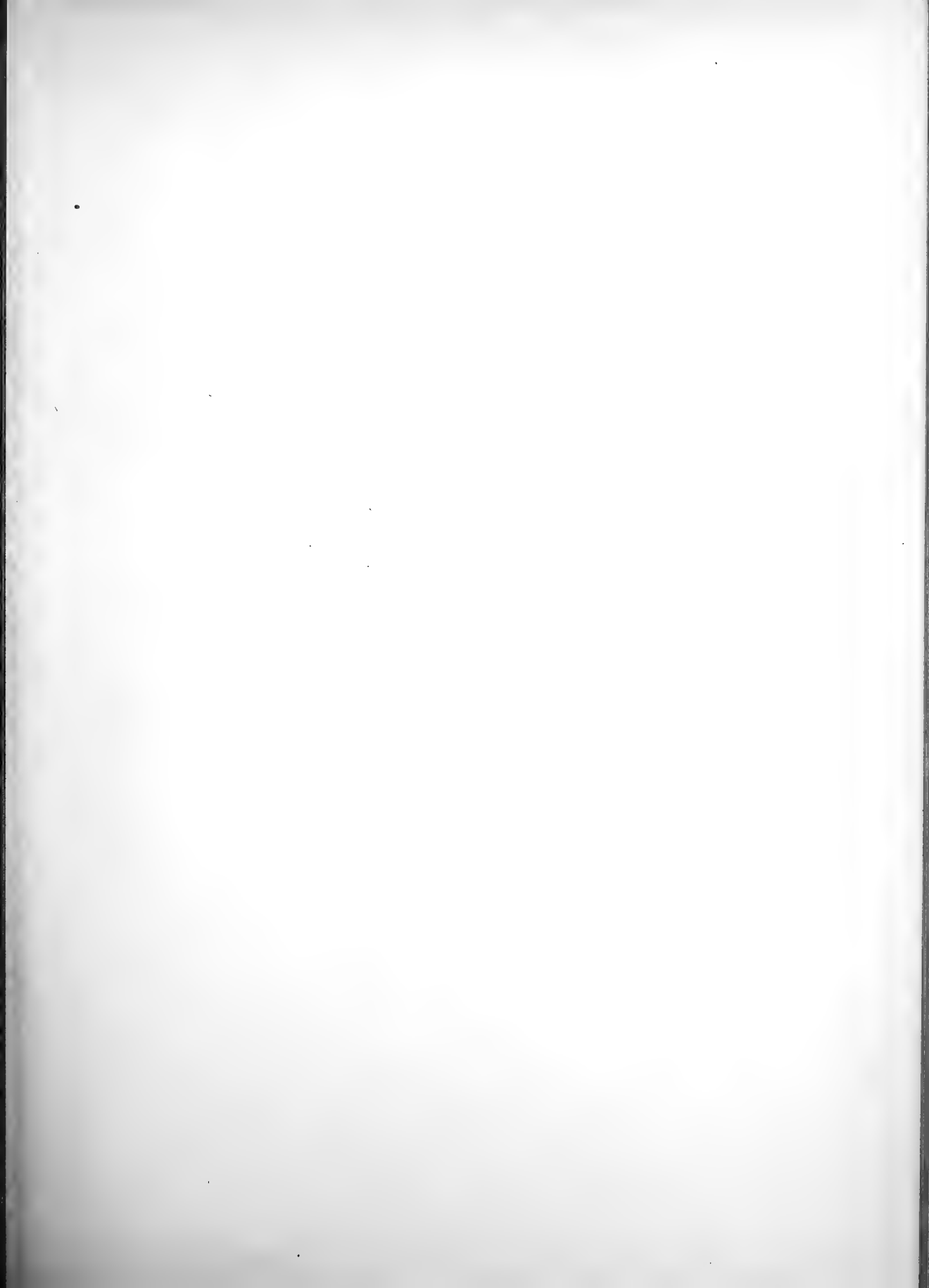
Near seashore, formerly abundant, now rare, considered to be the result of sheep breeding.

Flowers November—December.

East and West Falklands.

Description of plate :—1, whole plant ; 2, pod ; 3, section of pod ; 4, seed. All except 1 enlarged.







E.P.V. del. J.N.F. lith.

1 *Draba funiculosa*, Hook. f.
2 *Cardamine hirsuta*, Linn.

PLATE 8.

FIG. 1.—*DRABA FUNICULOSA*.

Family, CRUCIFERÆ:—Sepals 4. Petals 4, separate, arranged in a cruciform manner. Stamens 6, of which two are shorter than the others. Ovary solitary, 2-celled. Fruit, a pod.

Genus, *DRABA*:—Small, tufted annuals or perennials, usually hairy. Leaves springing from the root, the flower stalk having few or no leaves. Flowers white or yellow. Pod somewhat flattened and $1\frac{1}{2}$ –3 times as long as broad.

***Draba funiculosa*, Hook. f.** Plant about 3 in. high, glabrous, branched at base. Stem short, with leafy branches. Leaves about $\frac{1}{2}$ in. long, stiff, sometimes opposite with sheathing bases meeting round the stem, margins with hair-like teeth. Flowers 3–5 on a slender stalk, white, inconspicuous. Sepals ovate, with rounded tips. Petals twice as long as sepals, spoon-shaped. Stigma 2-lobed. Pod rounded at both ends.

Dry places near sea. Not common.

Flowers September and October. The earliest spring flower.

East and West Falklands.

Plate 8, Fig. 1:—Whole plant.

FIGS. 2–7.—*CARDAMINE HIRSUTA*.

Family, CRUCIFERÆ:—As above.

Genus, *CARDAMINE* (*Bittercress*):—Herbs, either annual or with a perennial rootstock, usually flaccid and glabrous or with a

few hairs. Flowers white, pink or mauve. Petals claw-shaped.

Distinguished from *Arabis* by its divided leaves.

Cardamine hirsuta, *Linn.* Plant very variable in size, often much branched at the base. Stem erect, slightly hairy. Leaves pinnate, 7-13 leaflets, leaflets of lower leaves roundish and toothed, of the upper leaves narrower, oblong and usually entire, dark green. Flowers small and white. Petals twice as long as very small sepals. Pod linear, terminated by a short style.

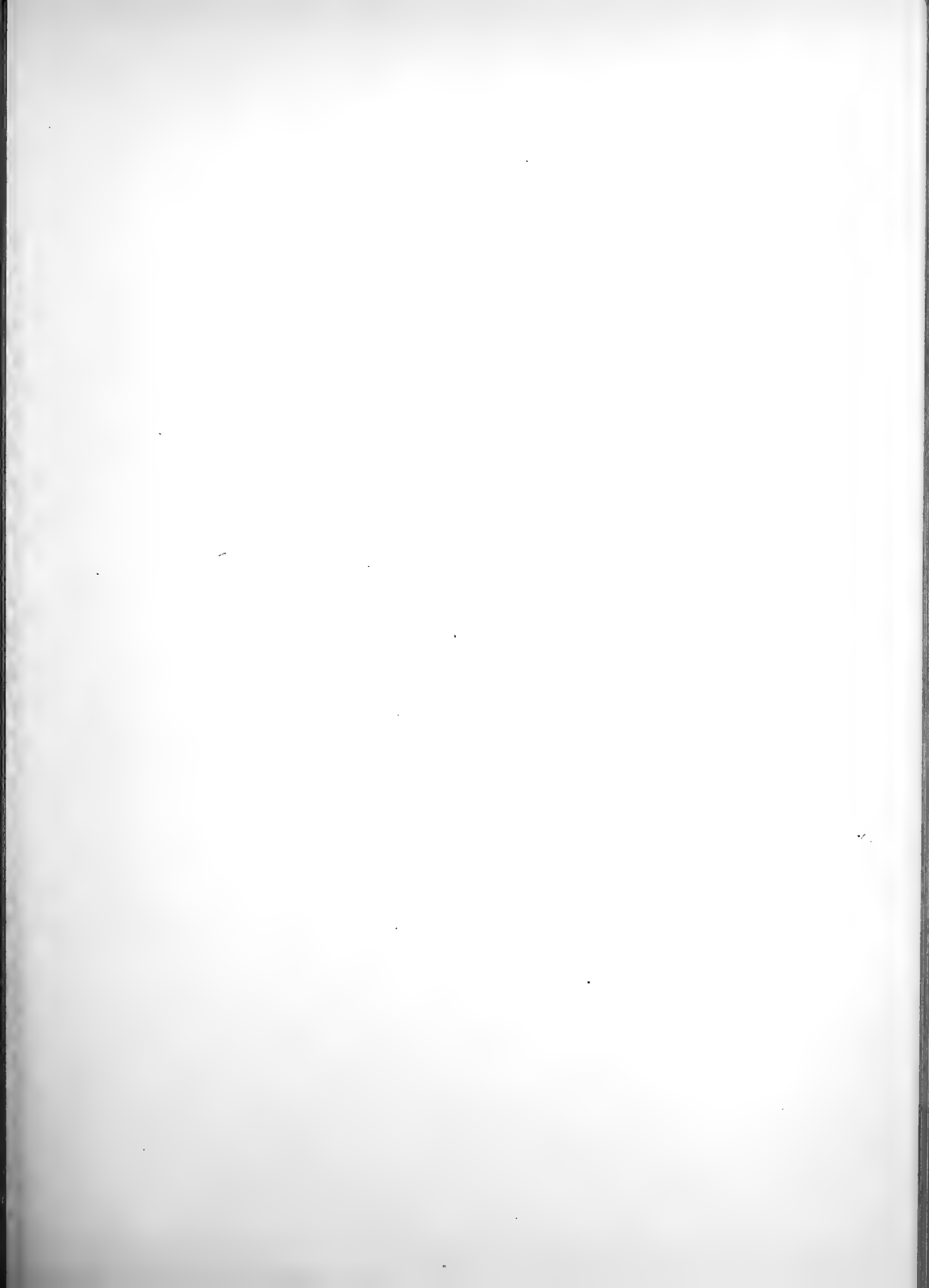
Moist places. Common, especially near the sea.

Flowers November and December.

East and West Falklands.

Skottsberg considers this plant a different species from the European one and calls it *Cardamine glacialis*.

Description of plate 8 :—2, whole plant ; 3, flower ; 4, petal ; 5 and 6, stamens ; 7, stamens and pistil. All except 2 enlarged.





E.F.V. del. J.N.F. lith

Cochlearia officinalis, Linn.

PLATE 9.

COCHLEARIA OFFICINALIS.

Family, CRUCIFERÆ:—Sepals 4. Petals 4, separate, arranged in a cruciform manner. Stamens 6, of which two are shorter than the others. Ovary solitary, 2-celled. Fruit, a pod.

Genus, COCHLEARIA (*Scurvy Grass*):—Annual or perennial herbs, glabrous, with simple, often fleshy leaves. Flowers small and white. Pod ovoid or nearly globose, containing several seeds in each cell.

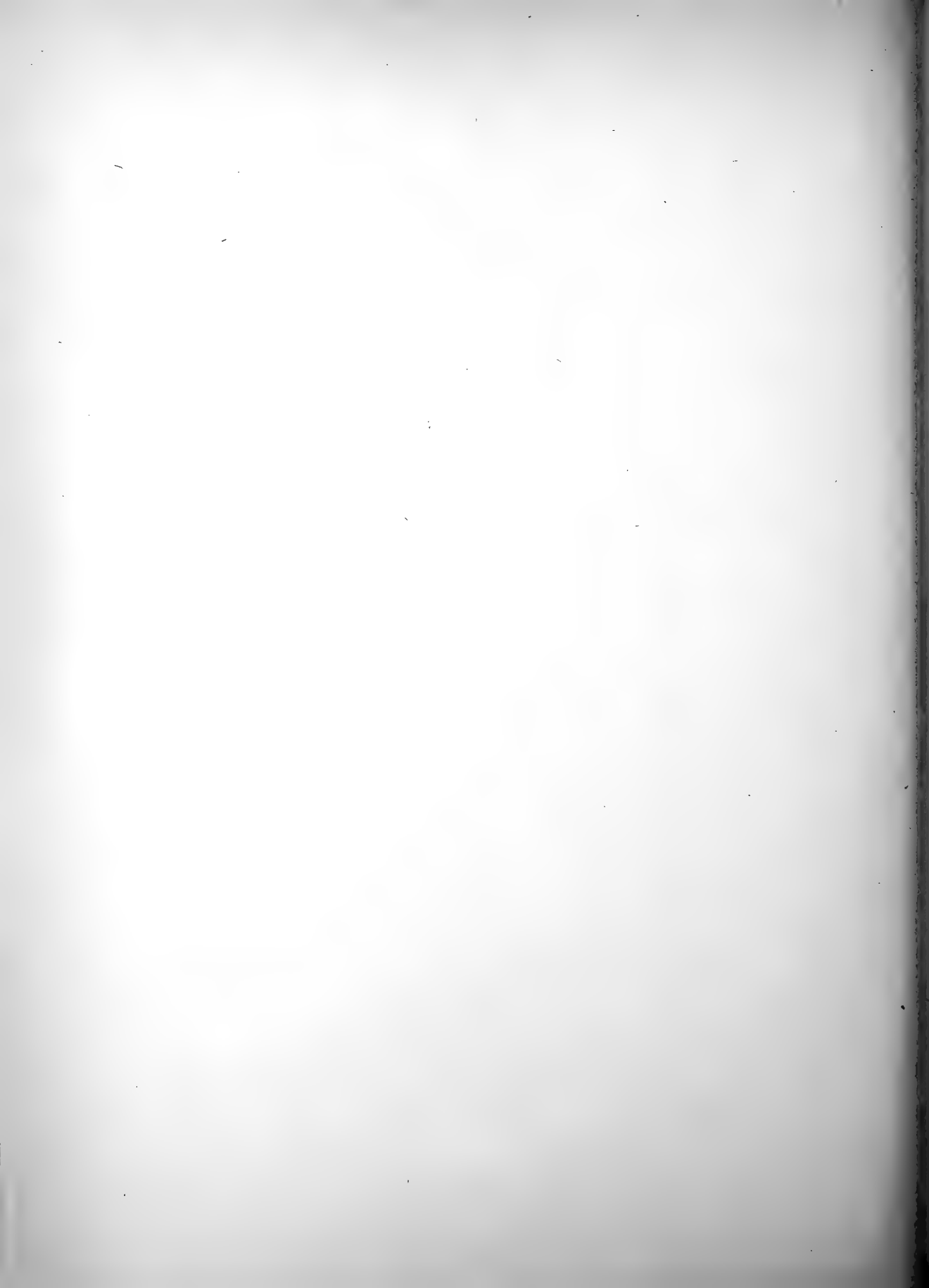
Cochlearia officinalis, *Linn.* Plant about 10 in. high, but varies very much in size. Stem often much branched. Leaves—those springing from the root are stalked, orbicular, kidney-shaped or heart-shaped, entire or lobed; those springing from the stem may be similar, or are more oblong and have no leaf stalk. Flowers arranged in a short spike. Petals spreading.

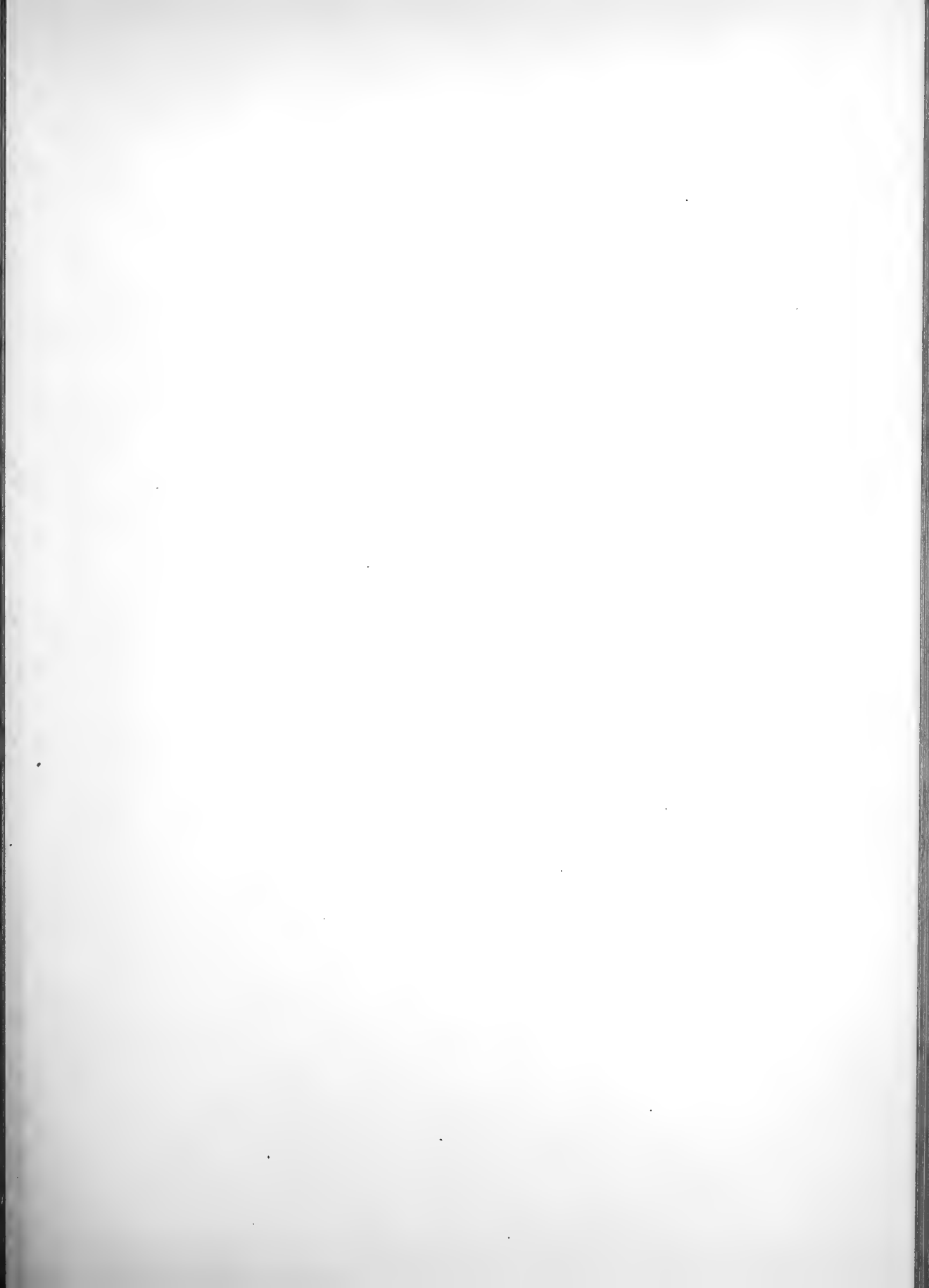
Probably introduced.

Flowers in December.

West Falklands.

Description of plate:—1, portion of plant in flower; 2, portion of plant in fruit; 3, pod; 4, section of pod; 5, seed; 6, section of seed. All except 1 and 2 enlarged.







E.P.V. del, J.N.P. lith

Draba falklandica, Hook. f.

PLATE 10.

DRABA FALKLANDICA.

Family, CRUCIFERÆ:—Sepals 4. Petals 4, separate, arranged in a cruciform manner. Stamens 6, of which two are shorter than the others. Ovary solitary, 2-celled. Fruit, a pod.

Genus, DRABA:—Small, tufted annuals or perennials, usually hairy. Leaves springing from the root, the flower stalk having few or no leaves. Flowers white or yellow. Pod somewhat flattened and $1\frac{1}{2}$ –3 times as long as broad.

Draba falklandica, *Hook. f.* Plant of a rosette-like habit, about 3 in. high. Stem branched, short and densely leafy. Leaves crowded, ovate or spatulate, about $\frac{1}{2}$ in. long, covered with silky hairs, also stellate hairs on under side. Flower stalks $1\frac{1}{2}$ – $2\frac{1}{2}$ in. long, hairy, fairly stout. Flowers small, white. Pod about $\frac{1}{4}$ in. long, hairy, rounded at both ends and containing small seeds.

This plant has rarely been found in the Falkland Islands and no definite information exists as to the localities.

Description of plate:—1, plant in flower; 2 and 3, flowers; 4, section of flower; 5, stamens and pistil; 6 and 7, stamens; 8, pistil; 9, stellate hair. All except 1 enlarged.





Ed. 2 del J. N. P. 1866

Viola maculata, Cav.

PLATE 11.

VIOLA MACULATA.

Family, VIOLACEÆ :—Petals separate. Stamens 5, the anthers placed on the inner face of short broad filaments. Ovary superior. Fruit, a capsule, 3-valved.

Genus, VIOLA (*Violet*) :—Usually herbaceous plants. Leaves scattered, radical or alternate, simple and possess stipules. Flowers irregular, spurred. Sepals produced beyond point of attachment. Stamens forming a ring round the ovary, anthers placed on the inner side of the short broad filaments. Ovary 1-celled. Fruit, capsule, dividing into 3 parts when ripe.

Viola maculata, *Cav.* Plant about 8 in. high. Stem short. Leaves with long leaf stalks, ovate, about 1–2 in. long, edges waved, hairy, often with brownish dots on under side. Flower stalk long, with minute hairs and bearing a pair of stipules hairy at the edges. Flower yellow, scentless. Sepals 5, green. Petals 5, with glandular hairs on inner side. Anthers with hairy margins. Stigma beak-shaped.

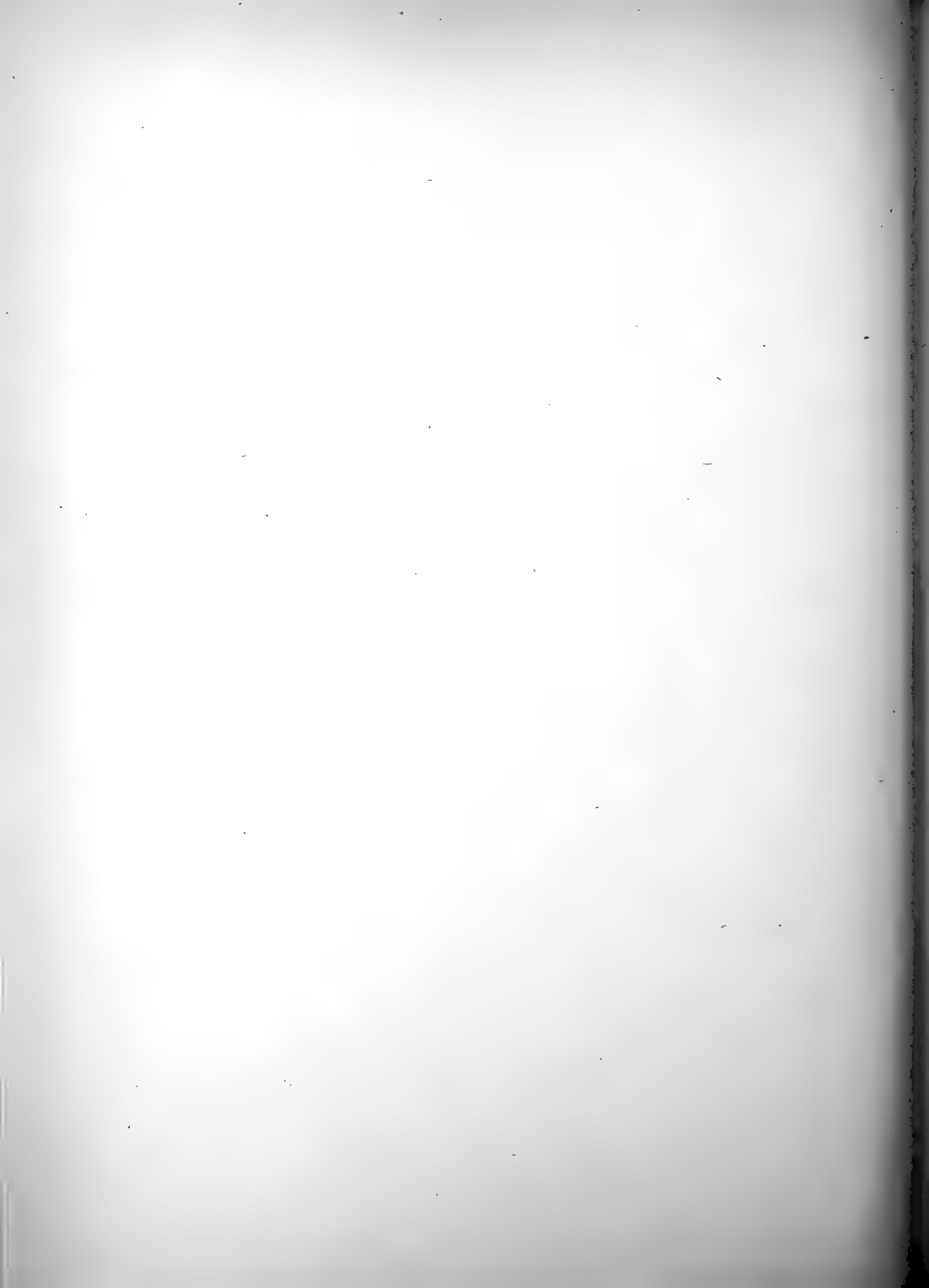
Sands and seashores. Fairly common.

Flowers in December.

East and West Falklands.

Another species of *Viola* occurs in the Falkland Islands, namely, *V. tridentata*, *Menz.* It is a mountain species and very scarce.

Description of plate :—1, plant ; 2, section of flower ; 3, stamens and pistil ; 4, spurred petal ; 5, section of ovary ; 6, fruit ; 7, ripe and opened fruit ; 8, seed. All except 1 enlarged.





EFV del JNF lnh

Stellaria media, Cyrillo.

PLATE 12.

STELLARIA MEDIA.

Family, CARYOPHYLLACEÆ :—Leaves opposite, entire. Flowers regular. Petals separate. Stamens definite. Ovary superior. Fruit, a capsule, 1-celled. Stem often swollen at the nodes.

Genus, STELLARIA (*Stitchwort*, *Starwort*) :—Annual or perennial herbs, slender, usually glabrous. Leaves grass-like or short and broad. Flowers white. Sepals 5. Petals 5, 2-lobed. Stamens 10, sometimes fewer. Styles 3 (rarely 5). Ovules many. Fruit a globose or oblong capsule opening into 6 (rarely 5) valves. Seeds kidney-shaped or globose, compressed at one side, often with granular markings.

Stellaria media, *Cyrill.* (Chickweed.) Plant annual, varies considerably in size, prostrate or ascending, and of a somewhat weak and straggling habit. Stem slightly hairy on one side, the leaf stalks also may have a few hairs. Leaves ovate, smooth. Flowers small, springing from the axils of the leaves, on rather long slender stalks. Sepals hairy. Petals shorter than sepals. Stamens 3, 5 or 10.

Introduced. Abundant.

This plant is extremely common in waste places, etc., in Europe and N. Asia, and has spread to all the temperate and colder regions of the globe.

Description of plate :—1, plant ; 2, flower ; 3, stamen ; 4, section of pistil ; 5, seed. All except 1 enlarged.



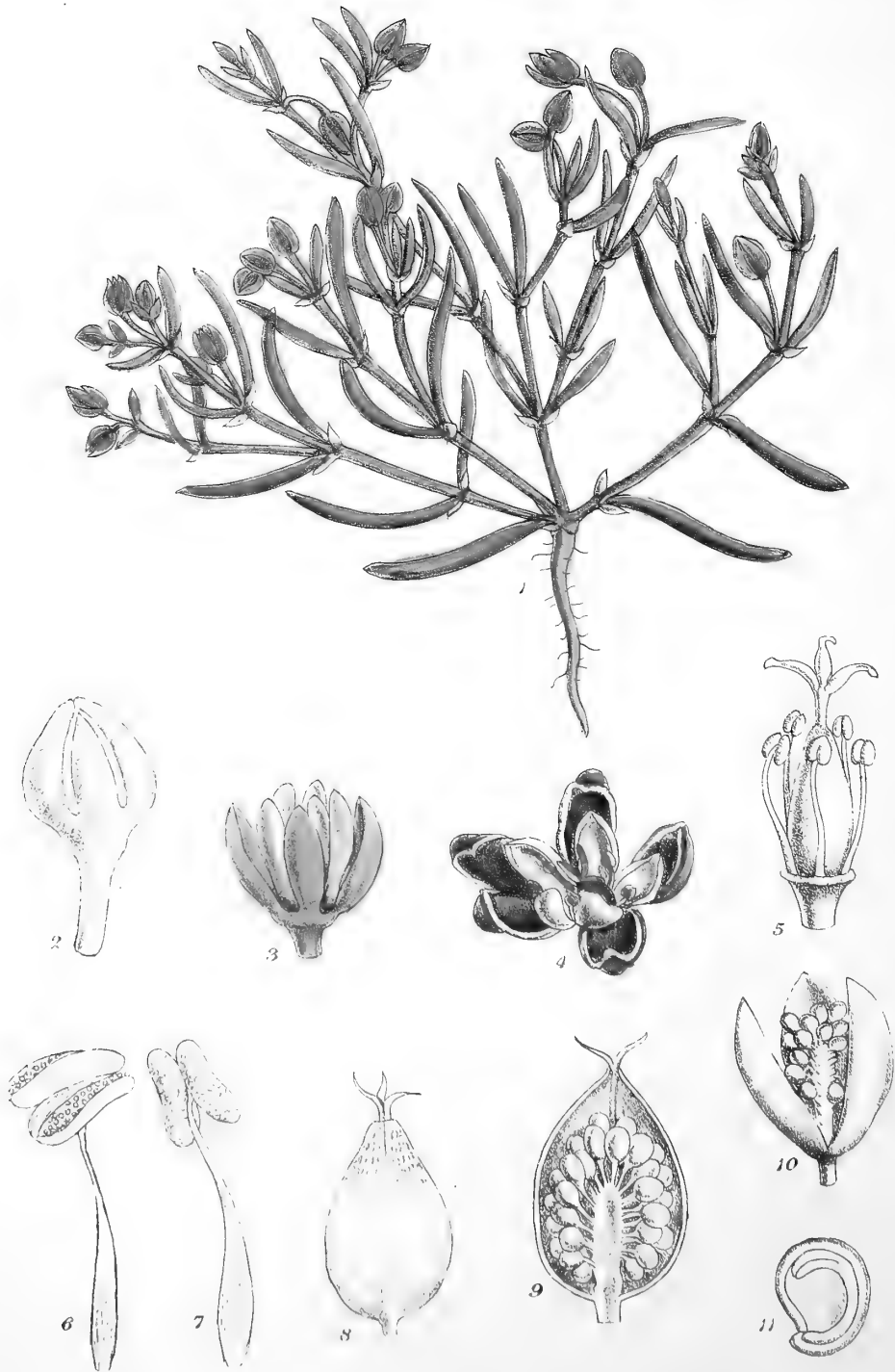


PLATE 13.

SPERGULARIA MEDIA.

Family, CARYOPHYLLACEÆ :—Leaves opposite, entire. Flowers regular. Petals separate. Stamens definite. Ovary superior. Fruit, a capsule, 1-celled. Stem often swollen at the nodes.

Genus, SPERGULARIA (*Sandspurrey*) :—Low, diffuse and usually prostrate herbs. Leaves awl-shaped or linear, often with clusters of smaller leaves in the axils. Stipules scaly. Flowers stalked. Sepals 5. Petals 5, rarely fewer, or none, entire. Stamens 10 or less. Ovary 1-celled with many ovules. Styles 3. Fruit, a capsule, opening into 3 valves. Seeds kidney-shaped or globose.

Distinguished from *Cerastium* and *Stellaria* by entire petals and from *Arenaria* by stipules.

***Spergularia media*, (L.) Presl.** Plant about 3 in. high, glabrous. Leaves about 1 in. long, awl-shaped, fleshy. Stipules scaly, ovate, and dull whitish in colour. Flowers pale mauve or nearly white. Sepals ovate. Petals as long as sepals. Stamens 10. Styles 3 (rarely 4 or 5). Capsule opening in as many valves as there are styles. Seeds pale brown, smooth.

Seashores. Rare.

Flowers December and January.

East and West Falklands.

Description of plate :—1, whole plant ; 2, bud ; 3 and 4, flowers ; 5, stamens and pistil ; 6 and 7, stamens ; 8, pistil ; 9, section of pistil ; 10, capsule ; 11, seed. All except 1 enlarged.





E.F.V del. J.N.F. lith

Cerastium arvense, L.
var. *strictum*, Hook. f.

PLATE 14.

CERASTIUM ARVENSE, VAR. STRICTUM.

Family, CARYOPHYLLACEÆ:—Leaves opposite, entire. Flowers regular. Petals separate. Stamens definite. Ovary superior. Fruit, a capsule, 1-celled. Stem often swollen at the nodes.

Genus, CERASTIUM (*Mouse-ear Chickweed*):—Annual or perennial herbs, nearly always hairy. Leaves vary somewhat, but are rarely awl-shaped. Flowers white. Sepals and petals 5 (rarely 4), the latter sometimes minute or absent, usually 2-lobed at apex. Stamens 10 (sometimes 5 or 4). Styles 5 (rarely 4 or 3). Fruit, a cylindrical capsule which opens at top into 6 or 10 short teeth. Usually distinguishable from *Stellaria* by its 5 styles.

***Cerastium arvense*, L. var. *strictum*, Hook. f.** (Field Mouse-ear, Chickweed.) Plant perennial, about 6–10 in. high. Stem much branched at the base, often prostrate with ascending flowering branches. Leaves narrow, about $\frac{1}{2}$ –1 in. long. Flowers scented, $\frac{1}{2}$ – $\frac{3}{4}$ in. across, on a slender stalk, white. Sepals $\frac{1}{4}$ in. long, with pointed apices and membranous margins. Petals twice as long as the sepals, rather deeply 2-lobed at apex.

Common among grasses, in dry fields.

Flowers January.

East and West Falklands.

Description of plate:—1, portion of plant; 2, section of flower; 3, stamens and pistil; 4 and 5, stamens; 6, pistil; 7, fruit; 8, seed. All except 1 enlarged.





E.F.V. del. J.N.F. lith

Oxalis enneaphylla, Cav.

PLATE 15.

OXALIS ENNEAPHYLLA.

Family, GERANIACEÆ, including OXALIDACEÆ :—Petals separate, twisted or imbricate in the bud. Stamens 10. Ovary superior. Leaves alternate, often compound.

Genus, OXALIS (*Wood Sorrel*) :—Acid herbs (name from Greek oxús, acid), the leaves and flower stalk springing from a rhizome. Leaves compound, sensitive. Flowers yellow, pink or white, regular. Sepals and petals 5, the latter contorted at the base. Stamens 10, free, or united below. Ovary 5-celled. Styles 5. Fruit, a capsule. The outer skin of the seed is elastic. It splits and throws the inner part of the seed to a distance.

***Oxalis enneaphylla*, Cav.** (“Vinaigrette,” Scurvy Grass.) Plant 6–11 in. high. Rhizome descending, eventually horizontal, 1–2 in. long, simple or branched, bulb-like, fleshy and scaly. Leaf stalks 4–9 in. long. Smooth or sometimes with a few hairs. Leaflets 7–20, 1–2 in. long, arranged in a radiating manner, often in several series entire, 2-lobed at apex, more or less hairy. Flower stalks like the leaf stalks, but bearing 2 bracts. Flowers white, pink or pale mauve, scented. Sepals pale green, oblong, with silky hairs. Petals about 1 in. long, 3 times as long as sepals, ovate, broadening towards apex. Stamens 10, filaments varying in length, the 5 longer having a large honey gland at the base. Styles white, hairy above, with yellowish-green capitate stigmas.

Abundant, especially near the sea.

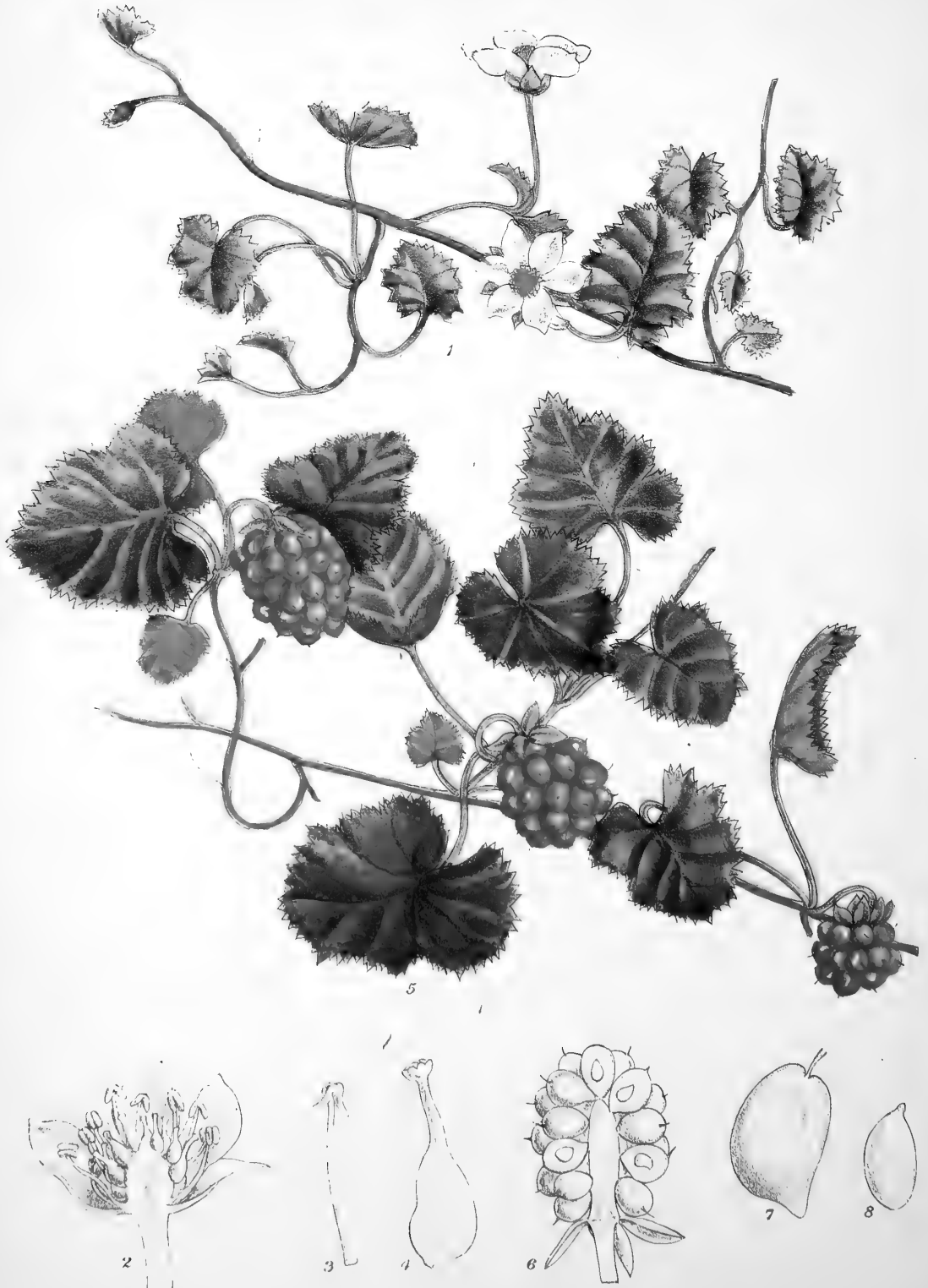
Flowers November and December.

East and West Falklands.

This plant is one of the most beautiful found in the Falkland Islands and is characteristic, as it does not occur elsewhere. Hooker says, “it grows in such abundance on the banks overhanging the sea at Berkeley Sound, as to cover them with a

mantle of snowy white during the spring month of November," though the plant is not so abundant at the present time. It possesses antiscorbutic properties, hence its name "Scurvy Grass," while a delicious and refreshing drink can be made from the stalks.

Description of plate :—1, whole plants ; 2, section of flower ; 3, stamens and pistil ; 4, pistil ; 5, seed. All except 1 and 2 enlarged.



EFV.del.JNF.lth.

Rubus geoides, Sm

PLATE 16.

RUBUS GEOIDES.

Family, ROSACEÆ:—Flowers regular. Petals separate. Stamens indefinite, situated round or upon the ovary. Receptacle generally hollowed. Leaves alternate, stipulate.

Genus, RUBUS (*Bramble*):—Shrubs or herbs, often straggling, usually prickly. Leaves divided into leaflets, rarely simply lobed, stipulate. Flowers in clusters, rarely solitary, white or pink. Sepals 5. Petals 5. Stamens numerous. Carpels many, arranged on a convex receptacle. The fruit is composed of the swollen, fleshy, 1-seeded carpels grouped on the dry receptacle.

Rubus geoides, *Sm.* Plant of a low, straggling habit, up to 6 in. high. Stem creeping, slender, but somewhat woody. Leaves on slender stalks, 1–3 or 4 in. long, somewhat heart-shaped, but rounded at the apex, $\frac{1}{2}$ – $1\frac{1}{4}$ in. long, edges irregularly toothed. Flowers solitary, white. Fruit almost as large as a raspberry, juicy, with a delicious flavour between that of a raspberry and strawberry.

On banks, moist or dry ground, near sea; not uncommon, abundant by rivers at Berkeley Sound.

Flowers November—January. Fruit ripens January and February.

East and West Falklands.

Description of plate:—1, portion of plant in flower; 2, section of flower; 3, stamen; 4, carpel; 5, portion of plant in fruit; 6, section of fruit; 7, 1 drupel; 8, seed. All except 1 and 5 enlarged.



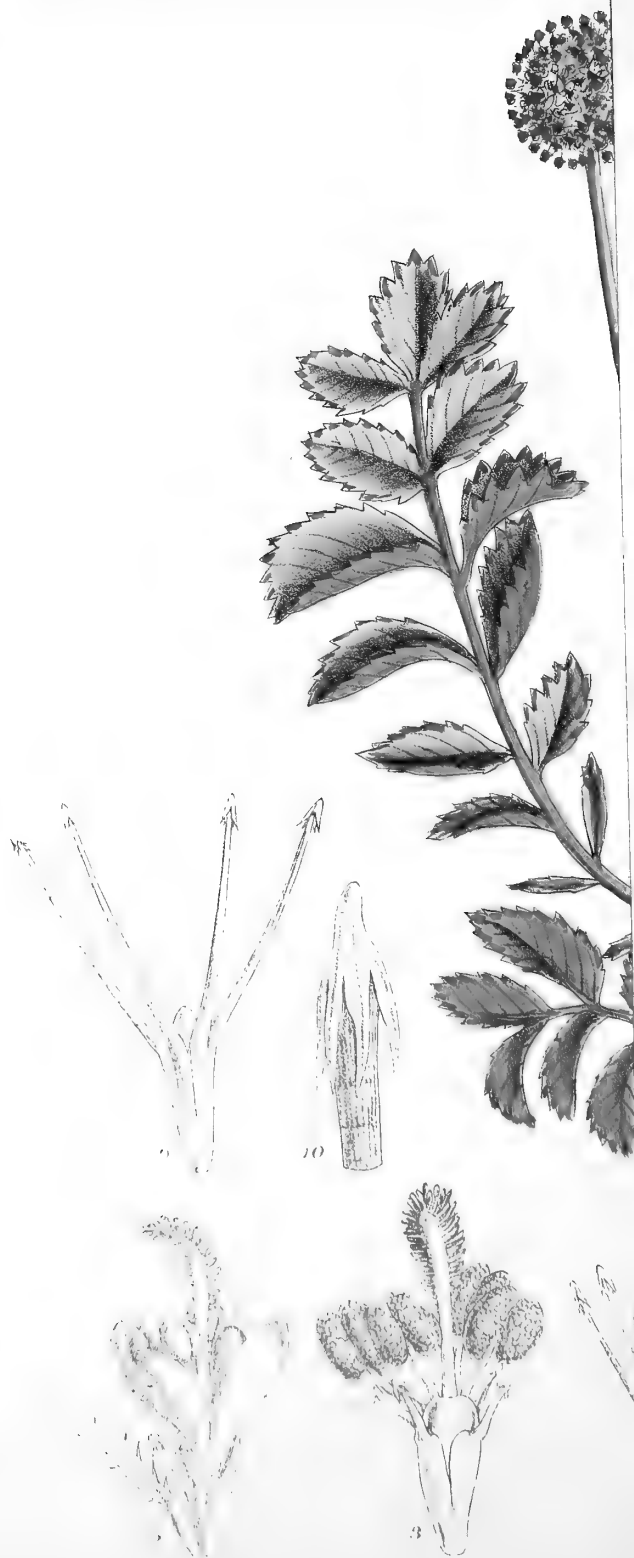


PLATE 17.

ACÆNA ASCENDENS.

Family, ROSACEÆ:—Flowers regular. Petals separate. Stamens indefinite, situated round or upon the ovary. Receptacle generally hollowed. Leaves alternate, stipulate.

Genus, ACÆNA:—Herbs, often creeping and woody at the base, glabrous or hairy, flowering branches erect. Leaves alternate, divided into unequal leaflets. Stipules at base of leaves adhering to the leaf stalk. Leaflets serrated. Flowers with bracts, in heads, at the apex of an elongated stem, usually red, or reddish-green. Calyx tube persistent, constricted at base, 3-7-lobed. Petals none. Stamens 1-10. Carpels 1-2. Capitulum or head of fruits with barbed spines resembling arrow heads. Seeds 1 to each flower.

Acæna ascendens, *Vahl*. Plant about 8-12 in. high. Stem long, prostrate, branched. Leafy branches smooth. Leaves more or less hairy. Leaflets 4-7 pairs, ovate-oblong, obtuse at the tip, rather deeply toothed. Flower stalk leafy below, leafless and smooth above. Flower head globose. Calyx lobes hairy on outer side. Stamens usually 4, longer than the calyx lobes. Stigmas long, tufted on one side. Fruit obconical, shortly hairy, with 4 long glochidia or spines.

In various situations, preferably where there is plenty of moisture—rocks near sea, meadows, banks of streams, etc. Abundant.

Flowers December.

West Falklands.

Description of plate:—1, portion of plant; 2, young flower; 3, flower with sepals removed; 4, more mature flower; 5, section of same; 6 and 7, stamens; 8, pistil; 9, fruit; 10, tip of spine. All except 1 enlarged.



PL. 17. JNE 17.

Acaena ascendens Vahl.

PLATE 17.

ACÆNA ASCENDENS.

Family, ROSACEÆ:—Flowers regular. Petals separate. Stamens indefinite, situated round or upon the ovary. Receptacle generally hollowed. Leaves alternate, stipulate.

Genus, ACÆNA:—Herbs, often creeping and woody at the base, glabrous or hairy, flowering branches erect. Leaves alternate, divided into unequal leaflets. Stipules at base of leaves adhering to the leaf stalk. Leaflets serrated. Flowers with bracts, in heads, at the apex of an elongated stem, usually red, or reddish-green. Calyx tube persistent, constricted at base, 3-7-lobed. Petals none. Stamens 1-10. Carpels 1-2. Capitulum or head of fruits with barbed spines resembling arrow heads. Seeds 1 to each flower.

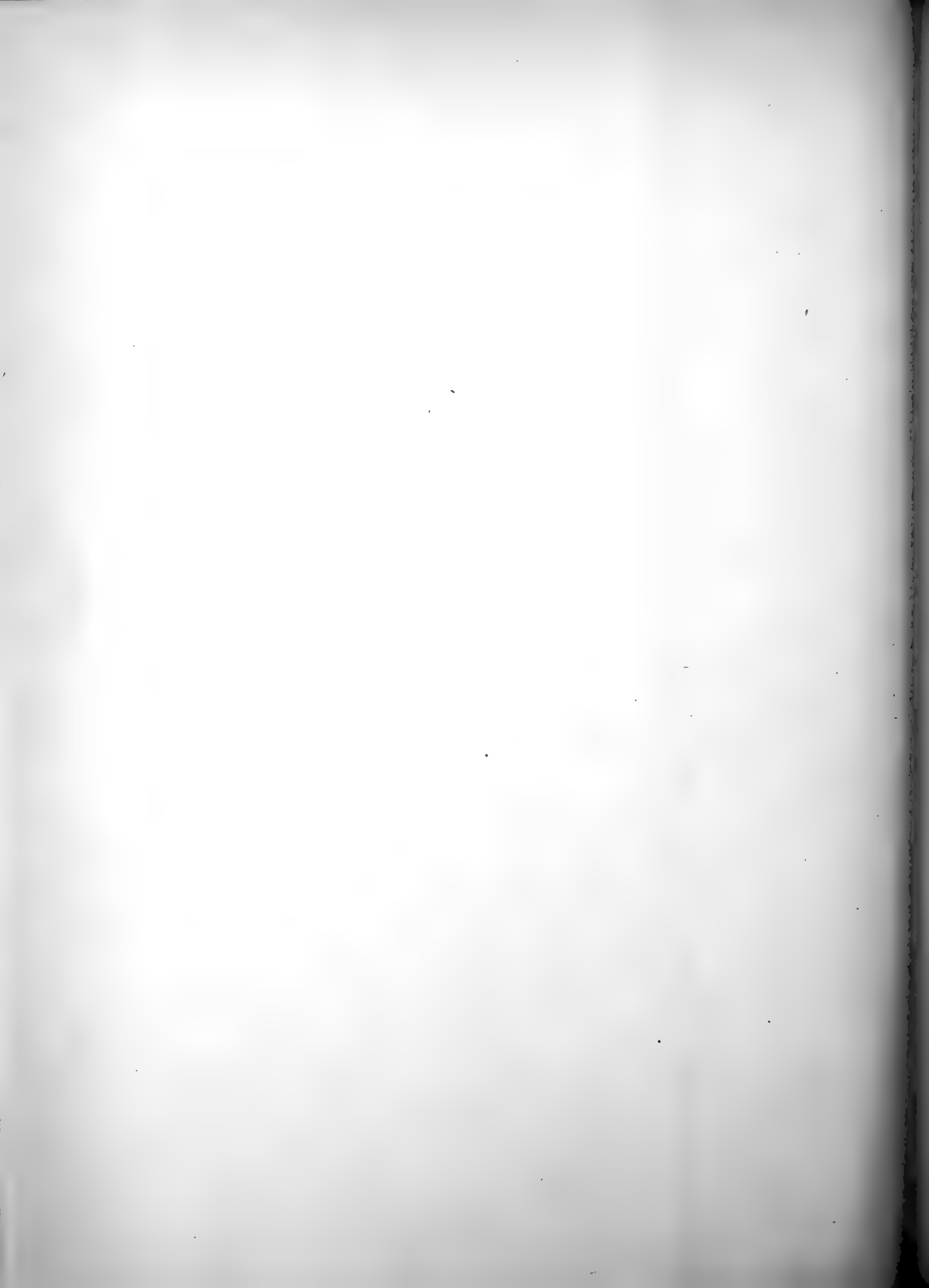
Acæna ascendens, *Vahl*. Plant about 8-12 in. high. Stem long, prostrate, branched. Leafy branches smooth. Leaves more or less hairy. Leaflets 4-7 pairs, ovate-oblong, obtuse at the tip, rather deeply toothed. Flower stalk leafy below, leafless and smooth above. Flower head globose. Calyx lobes hairy on outer side. Stamens usually 4, longer than the calyx lobes. Stigmas long, tufted on one side. Fruit obconical, shortly hairy, with 4 long glochidia or spines.

In various situations, preferably where there is plenty of moisture—rocks near sea, meadows, banks of streams, etc. Abundant.

Flowers December.

West Falklands.

Description of plate:—1, portion of plant; 2, young flower; 3, flower with sepals removed; 4, more mature flower; 5, section of same; 6 and 7, stamens; 8, pistil; 9, fruit; 10, tip of spine. All except 1 enlarged.





E.F.V. del. J.N.F. lith.

1-3 *Acaena lucida*, Vahl.
4-10 *Drosera uniflora*, Willd.

PLATE 18.

FIGS. 1-3.—*ACÆNA LUCIDA*.

Family, *ROSACEÆ*:—Flowers regular. Petals separate. Stamens indefinite, situated round or upon the ovary. Receptacle generally hollowed. Leaves alternate, stipulate.

Genus, *ACÆNA*:—Herbs, often creeping and woody at the base, glabrous or hairy, flowering branches erect. Leaves alternate, divided into unequal leaflets. Stipules at base of leaves adhering to the leaf stalk. Leaflets serrated. Flowers with bracts, in heads, at the apex of an elongated stem, usually red or reddish-green. Calyx tube persistent, constricted at the base, 3-7 lobed. Petals none. Stamens 1-10. Carpels 1-2. Capitulum or head of fruits with barbed spines resembling arrow heads. Seeds 1 to each flower.

***Acæna lucida*, Vahl.** Plant 3-6 in. high, lightly hairy. Stem prostrate, branched, with many ascending branches. Leaves about 1 in. long. Leaflets small, 8-9 pairs, linear-oblong, hairy on the under side. Flower stalks about 3 in. Flower heads usually solitary, hairy, $\frac{1}{3}$ in. in diameter. Flowers greenish-bronze. Stamens usually 2. Fruit tetragonal, tubercular, hairy above.

Common on dry ground near sea.

East and West Falklands.

Acæna lævigata, Ait. Very closely resembles *A. ascendens*, but differs in the following respects:—The leaflets are less hairy, the flower stalks are sometimes branched, the calyx is smooth, stigma shorter and broader and the fruit smooth. This plant is fairly common near the sea and grows to a good height in sheltered valleys.

Flowers in December.

East and West Falklands.

Description of plate:—1, portion of plant in fruit; 2, fruit; 3, section of fruit. Figs. 2 and 3 enlarged.

FIGS. 4-10.—DROSERA UNIFLORA.

Family, DROSERACEÆ :—Insectivorous herbs with radical leaves covered with glandular hairs. Flowers regular, 4-5 merous. Petals separate. Ovary superior. Fruit a loculicidal capsule.

Genus, DROSERA (*Sundew*) :—Small, insectivorous, marsh plants. Leaves radical, long-stalked and covered with glandular hairs or tentacles. Flowers arranged in a 1-sided inflorescence, on a leafless stalk. Sepals, petals and stamens, 5. Styles 2-5, deeply 2-lobed. Fruit a 1-celled capsule, opening into 2-5 (or more) valves.

***Drosera uniflora*, Willd.** Plant an inch or two high. Root fibrous, fleshy. Stem very short or practically none. Leaves rotund, about $\frac{1}{2}$ in. in diameter. Flower stalk erect, longer than the leaf stalks, usually 1-flowered, but sometimes more. Flowers conspicuous for such a small plant. Sepals spoon-shaped. Petals longer than sepals, ovate, widening towards apex.

Peat bogs, not uncommon.

East and West Falklands.

Description of plate :—4, whole plant ; 5, flower ; 6, section of flower ; 7, stamen ; 8, pistil ; 9, seed ; 10, section of seed. All except 4 enlarged.



EPV del JNF lith.

Gunnera magellanica.

PLATE 19.

GUNNERA MAGELLANICA.

Family, HALORAGACEÆ:—Aquatic herbs with very small, often unisexual flowers. Calyx lobes and petals 4, 2 or none. Petals separate. Stamens definite. Ovary inferior. Styles distinct.

Genus, GUNNERA:—Perennial herbaceous plants with a creeping rhizome. Sometimes attaining a good height. Leaves all radical, ovate or kidney-shaped. Flowers arranged in a spike-like inflorescence, hermaphrodite, or male and female flowers distinct, small, crimson or greenish-red. Calyx tube ovoid or compressed, 2-3 lobed, unequal in male flowers and often imperfect or absent. Petals 2 or none. Stamens 1-2. Ovary 1-celled. Styles 2. Fruit a drupe, either firm and dry or fleshy, 3-angled or nearly globose.

***Gunnera magellanica*, Lam.** (Locally called "pig oure.") Plant varies very much in size. Leaves kidney-shaped, 1-2½ in. broad with regular rounded teeth, smooth on the upper surface, hairy on the under, leaf stalk also hairy. Male and female flowers distinct and on different plants. Spike of male flowers longer than the leaves and the flowers are shortly stalked. The female spikes are shorter than the leaves and the flowers have no stalks. Calyx lobes narrow. Petals none. Styles feathery. Fruit brilliant scarlet.

Found on many kinds of soil, in sheltered places near sea, but is most luxuriant in damp situations. Very abundant, eaten by cattle.

Flowers in November.

East and West Falklands.

Description of plate:—1, plant with female spike; 2 and 3, male spike; 4, female spike; 5, pistil; 6, section of pistil; 7, fruit; 8, section of fruit. Figs. 3 and 5-8 enlarged.





EPVdel. JNPlth.

Myrteola nummularia, (Poir) Berg.

PLATE 20.

MYRTEOLA NUMMULARIA.

Family, MYRTACEÆ:—Leaves opposite, evergreen. Flowers regular. Sepals 4 or 5. Petals separate, 4 or 5. Stamens indefinite. Receptacle more or less hollow.

Genus, MYRTEOLA:—Dwarf shrubs, rarely trees. Leaves opposite, marked with dots, which are translucent glands. Flower stalks springing from the axils of the leaves, 1-many flowered. Calyx tube joined to, and only shortly produced beyond, the ovary. Stamens numerous. Ovary below the petals, sepals and stamens. Style slender. Stigma capitate. Fruit a berry. Seeds 1, 2 or numerous.

Myrteola nummularia, (*Poir.*) *Berg.* A straggling, smooth, somewhat woody plant. Leaves tough, shining, evergreen, $\frac{1}{4}$ – $\frac{1}{2}$ in. in length, rotund, leaf stalk short or absent. Flowers solitary, stalked, small and inconspicuous, yellowish-white. Petals twice as long as calyx lobes. Berry $\frac{1}{4}$ in. long, red or delicate pink, white on under side, fleshy, edible, with a pleasant taste and smell.

Heaths and bogs, spreading over the ground amongst other plants. Abundant.

Flowers in December.

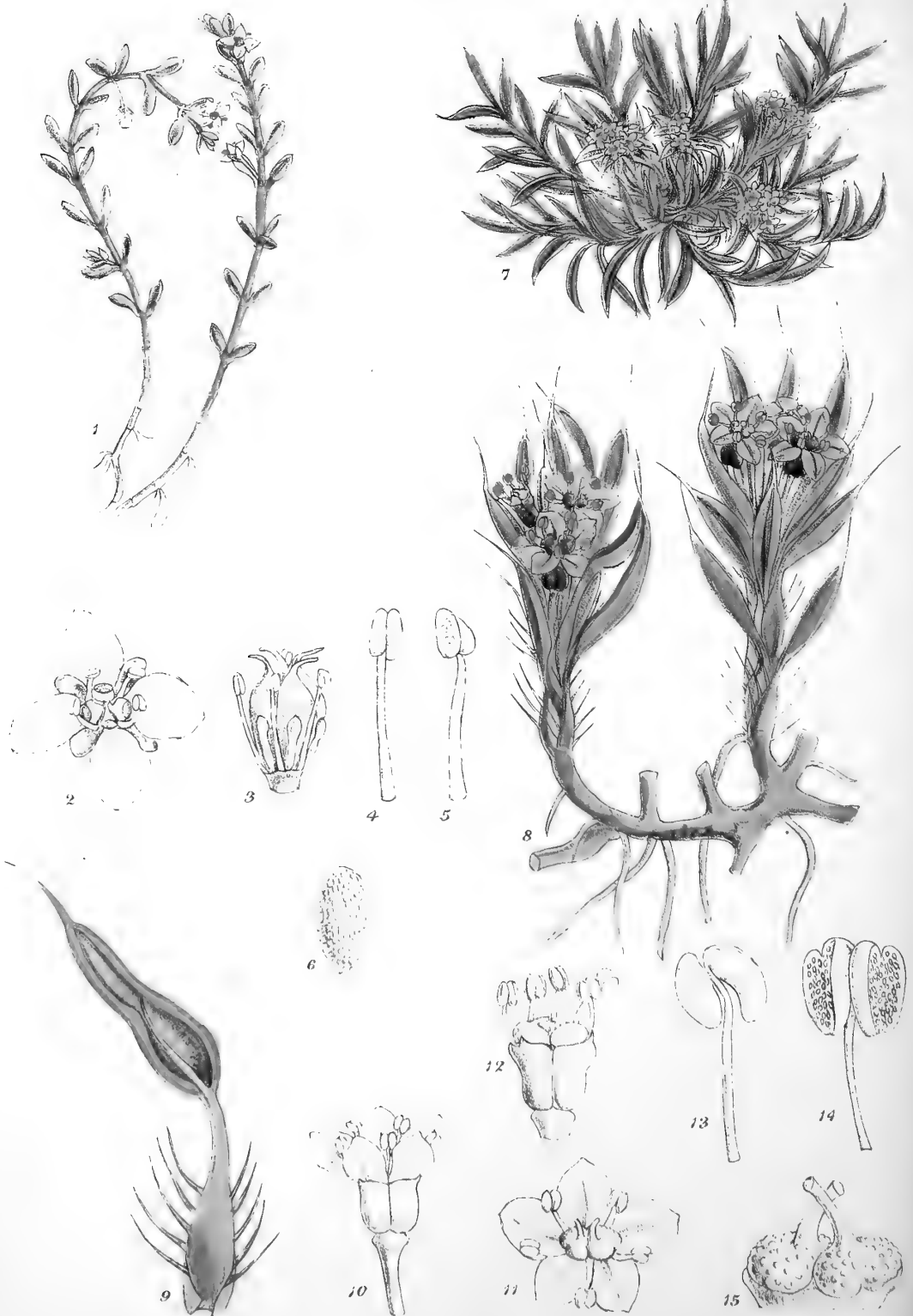
East and West Falklands.

The sealers who visited the Falkland Islands, and were the first settlers there, used the leaves of this plant as a substitute for tea.

Description of plate:—1, portion of plant in flower; 2, flower; 3, section of flower; 4, calyx and pistil; 5 and 6, stamens; 7, portion of plant in fruit; 8, fruit; 9, section of fruit; 10, seed. All except 1 and 7 enlarged.







EFV. del JNF. th.

1-5 *Tillaea moschata*, Dc.
6-15 *Azorolla filamentosa*, Lamk.

PLATE 21.

FIGS. 1-5.—*TILLÆA MOSCHATA*.

Family, CRASSULACEÆ:—Leaves succulent. Petals, sepals and carpels the same in number. Petals separate. Carpels free.

Genus, *TILLÆA*:—Small, somewhat succulent and mostly glabrous herbs. Leaves opposite, cylindrical, awl-shaped or flat, entire. Flowers minute, springing from axils of leaves, solitary or in clusters, white or red. Calyx 3-5-lobed. Petals 3-5, free. Stamens 3-5. Carpels 3-5, free.

***Tillæa moschata*, DC.** Plant about 3 in. high, more or less prostrate, branched at the base. Leaves small, ovate-oblong, flat, each pair united at the base. Flowers in the axils of the upper leaves, with short stalks. Parts of flower in fours. Petals ovate. Filaments of stamens. Stigma orange. Carpels ovate or globose.

Seashores, moist places among rocks, etc. "Just above high-water mark, bathed with sea water at top of spring tides" (Vallentin). Very abundant on rocky beaches where fresh water enters the sea (Hooker).

Very common.

East and West Falklands.

Description of plate:—1, whole plant; 2, flower; 3, stamens and pistil; 4 and 5, stamens; 6, seed.

FIGS. 6-15.—*AZORELLA FILAMENTOSA*.

Family, UMBELLIFERÆ:—Leaves alternate. Flower head an umbel. Petals separate. Stamens situated round the ovary. Fruit dry.

Genus, AZORELLA :—Perennial herbs, often much branched and forming cushions. Leaves entire, toothed or dissected often into 3 leaflets or in a palmate manner. Stipules scaly or absent. Umbels of flowers sessile or with a short stalk, between the leaves, 1-many flowered. Bracts of the involucre small and free or large and joined at the base. Disc flat, fleshy. Calyx teeth evident. Petals entire, obtuse, overlapping. Fruit sometimes laterally compressed, furrowed.

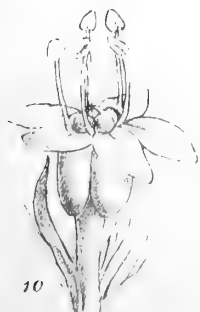
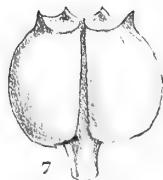
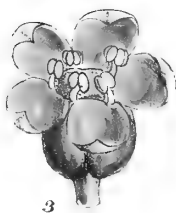
Azorella filamentosa, *Lamk.* Plant somewhat tufted, about 3 or 4 in. high. Stem much branched. Leaves linear, almost boat-shaped, margins inflexed, entire. Leaf stalk about same length as leaf, sheathing with stiff hairs at the base. Umbels with short stalks, 6-8-flowered. Petals brownish-yellow with green vein in centre. Anthers yellow. Pistil green. Fruit ovate or nearly terete.

A steppe plant, fairly common on dry, sandy heaths.

Flowers in November.

East and West Falklands.

Description of plate:—7 and 8, plant; 9, leaf; 10, flower; 11, flower seen from above; 12, stamens and pistil; 13 and 14, stamens; 15, pistil. All except 7 enlarged.



E. F. V. del. J. N. P. lith.

1-8 *Azorella ranunculus*, d'Urv.
9-14 *Azorella caespitosa*, Cav.

PLATE 22.

FIGS. 1-8.—AZORELLA RANUNCULUS.

Family, UMBELLIFERÆ :—Leaves alternate. Flower head an umbel. Petals separate. Stamens situated round the ovary. Fruit dry.

Genus, AZORELLA :—Perennial herbs, often much branched and forming cushions. Leaves entire, toothed or dissected often into 3 leaflets or in a palmate manner. Stipules scaly or absent. Umbels of flowers sessile or with a short stalk, between the leaves, 1-many flowered. Bracts of the involucre small and free or large and joined at the base. Disc flat, fleshy. Calyx teeth evident. Petals entire, obtuse, overlapping. Fruit sometimes laterally compressed, furrowed.

Azorella Ranunculus, *d'Urv.* Plant about an inch high, smooth. Stem creeping, throwing out fibrous roots from the nodes. Leaves with long leaf stalks, $\frac{1}{3}$ in. in diameter, rotundate, 4-5 partite, the parts wedge-shaped, with rounded teeth. Flower stalks shorter than the leaf stalks. Bracts of the involucre awl-shaped, toothed. Umbel 3-5 flowered. Flowers more conspicuous than most Azorellas. Petals 5, greenish-white with red tips. Stamens with white filaments and dark crimson anthers. Fruit short, nearly round, contracted in centre.

By running streams and fresh-water lagoons. Widely spread, but very local.

Flowers in December.

East and West Falklands.

Description of plate :—1, whole plant ; 2 and 3, flowers ; 4, flower with petals removed ; 5 and 6, anthers ; 7, fruit ; 8, seed. All except 1 enlarged.

FIGS. 9-14.—AZORELLA CÆSPITOSA.

Family, UMBELLIFERÆ :—As above.

Genus, AZORELLA :—As above.

Azorella cæspitosa, *Cav.* Plant forming a dense cushion about 1-4 in. high. Leaves with filamentous sheaths, overlapping, $\frac{3}{8}$ in. long, narrow, widening at the base, with pointed apices, tough, bright green. Umbels sessile, among the upper leaves, 6-8-flowered, with hairy bracts. Calyx tube hairy, with 5 short lobes. Petals oblong, yellow.

On slopes of weathered sandstone near the sea; one of the very few plants that prosper on the terrible sliding soil of the Patagonian Andes. Only found in the western extremity of the West Falklands.

Description of plate :—9, portion of plant; 10 and 11, flowers; 12, flower with petals removed; 13 and 14, stamens. All except 9 enlarged.

PLATE 23.

CRANTZIA LINEATA.

Family, UMBELLIFERÆ :—Leaves alternate. Flower head an umbel. Petals separate. Stamens situated round the ovary. Fruit dry.

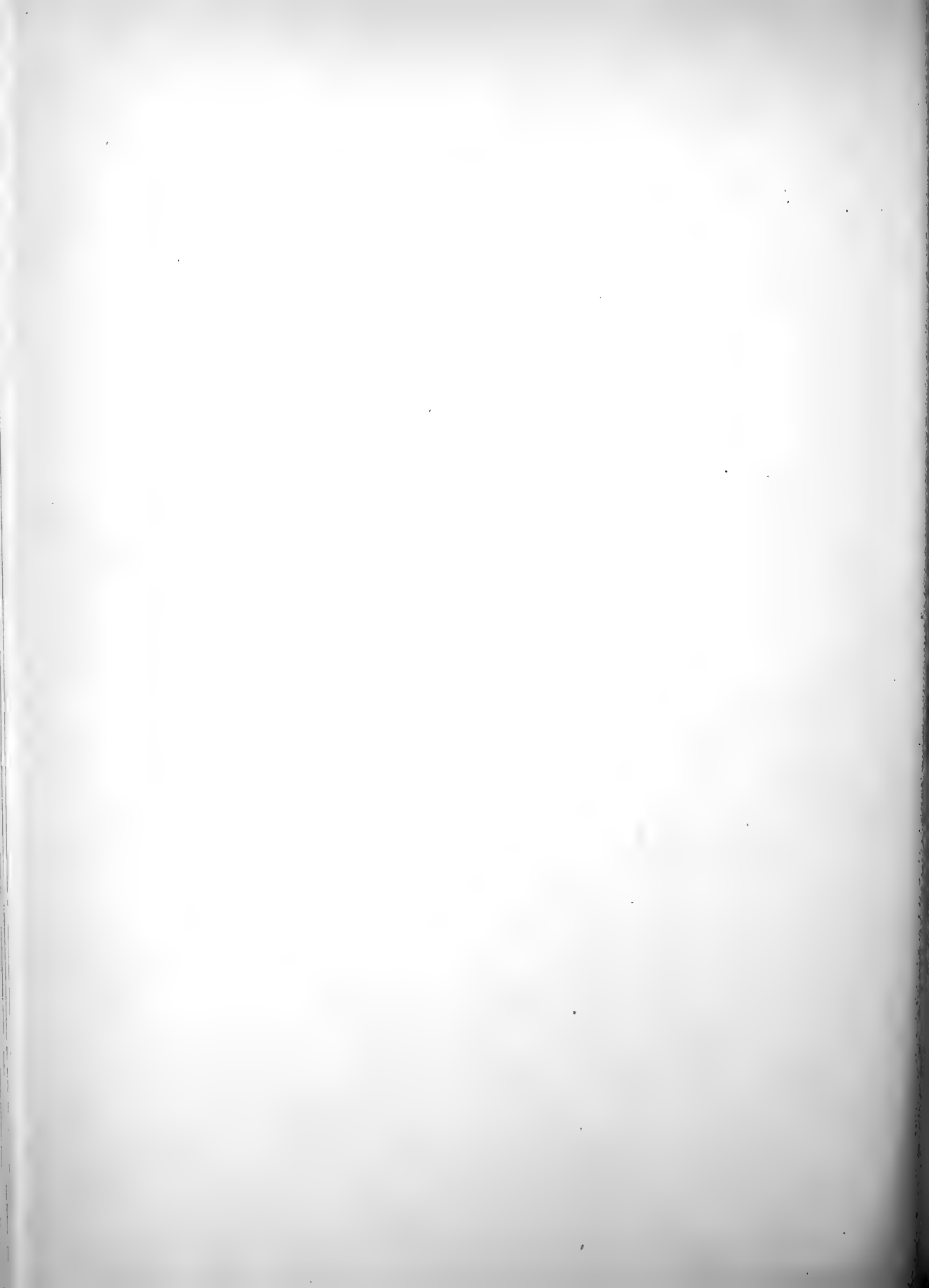
Genus, CRANTZIA :—Herbaceous, marsh plants, small, creeping, smooth. Leaves hollow, linear, transversely jointed. Umbel simple, bracts of the involucre minute. Flowers white. Calyx teeth small. Petals concave, apices acute.

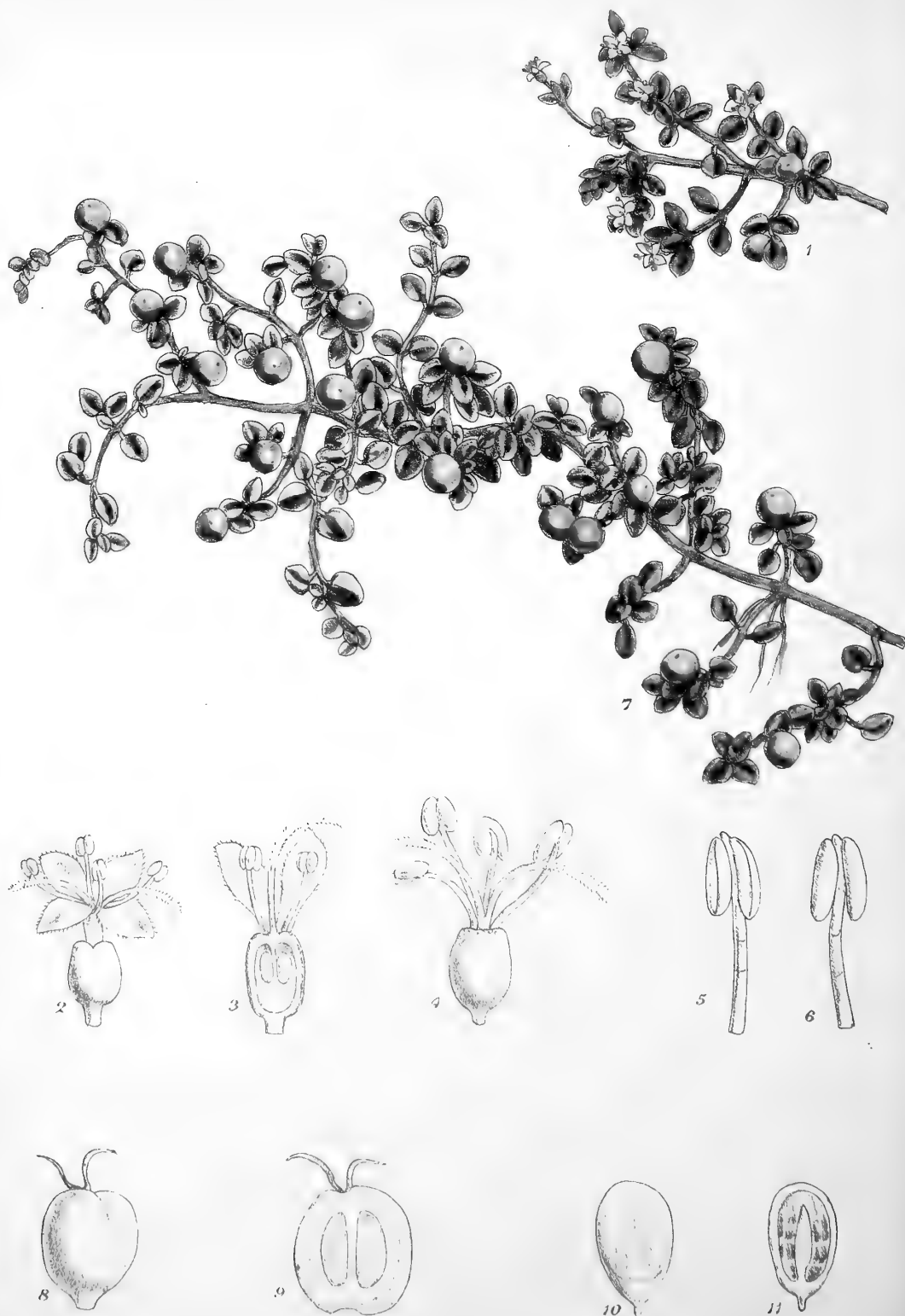
Crantzia lineata, Nutt. Plant varies in size, often being long and straggling, usually about 4 in. high. Stem creeping, terete. Leaves very narrow, $1\frac{1}{2}$ –3 in. long, succulent, erect, no leaf stalks, each marked with 5, rarely 6, transverse lines. Umbels solitary, springing from axils of leaves, 8–12-flowered. Flowers stalked. Calyx teeth may be absent. Petals roundish-oval. Styles very short, curved. Fruit nearly spherical.

In moist places, fresh-water lagoons, streams, etc. Abundant. Flowers in January.

East and West Falklands.

Description of plate :—1, portions of plant in flower and fruit ; 2, flower ; 3, petal ; 4, flower with petals removed ; 5, 6 and 7, stamens ; 8, fruit ; 9 and 10, sections of fruit. All except 1 enlarged.





E.F.V.del., J.N.F.lith

Nertera depressa, Banks.

PLATE 24.

NERTERA DEPRESSA.

Family, RUBIACEÆ :—Petals united. Ovary inferior. Corolla bearing the stamens. Stipules resemble leaves and form whorls with them round the stem. Ovary 2-celled, 1 ovule in each.

Genus, NERTERA :—Graceful, creeping herbs. Leaves small, opposite, with or without stalks, ovate or narrowly ovate. Stipules present. Flowers springing from axils of leaves, with no stalks. Calyx tube ovoid, with 4–5 teeth. Corolla funnel-shaped, limb with 4 lobes. Stamens 4. Anthers large. Ovary 2-celled. Style forked into 2, hairy on under side. Fruit a fleshy, red drupe.

Nertera depressa, *Banks*. Plant low, creeping among mosses. Leaves stalked, roundish-ovate, about $\frac{1}{4}$ in. long and nearly as broad as long. Flowers small and inconspicuous, pale greenish-yellow. Fruit globular, bright red, and very showy; in fact this plant is much cultivated on account of its attractive fruits.

Moist ground and rocks near sea. Common.

East and West Falklands.

Description of plate :—1, portion of plant in flower; 2, flower; 3, section of flower; 4, flower with corolla removed; 5 and 6, stamens; 7, portion of plant in fruit; 8, fruit; 9, section of fruit; 10, seed; 11, section of seed. All except 1 and 7 enlarged.





EFVdelJNFlth

Galium antarcticum. Hook.f.

PLATE 25.

GALIUM ANTARCTICUM.

Family, RUBIACEÆ :—Petals united. Ovary inferior. Corolla bearing the stamens. Stipules resemble leaves and form whorls with them round the stem. Ovary 2-celled, 1 ovule in each.

Genus, GALIUM :—Herbs of weak growth, with quadrangular stems. Leaves in whorls of 4, 6 or 8. Flowers small, springing from axils of leaves, white or yellow (sometimes red). Calyx absent. Corolla rotate. Carpels 2, 1 seed in each. Fruit small, dry.

Galium antarcticum, *Hook. f.* Plant 3–5 in. high. Stem decumbent, slender and sparingly branched. Leaves about $\frac{1}{2}$ in. long, in fours, oblong or narrowly oblong, apices rounded, margins rough. Flowers with no stalks, solitary, white, scented. Corolla 3-lobed. Stamens 3. Fruit with a thick, short stalk.

Moist places, near streams and fresh-water lagoons. Common.

Flowers December.

Description of plate :—1, portion of plant in flower ; 2, flower with foliage ; 3 and 4, flowers ; 5, section of flower ; 6, pistil ; 7, portion of plant in fruit ; 8, fruit. All except 1 and 7 enlarged.



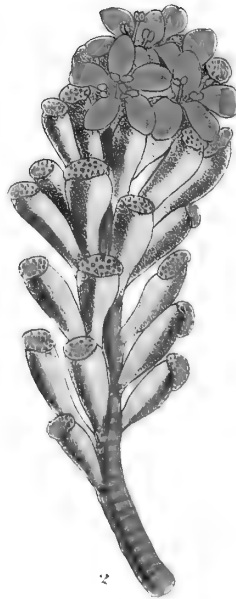
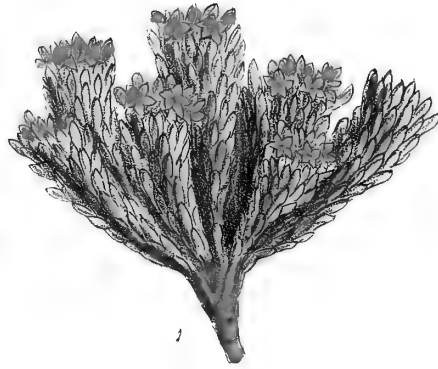


PLATE 26.

VALERIANA SEDIFOLIA.

Family, VALERIANEÆ :—Petals united. Ovary inferior. Corolla 5-lobed, bearing the stamens. Stamens 1-4. Anthers introrse.

Genus, VALERIANA :—Perennial herbs, sometimes shrubby, erect, smooth. Leaves divided or entire, springing from stem or root. Flower white, red or yellow. Corolla funnel-shaped. Stamens 3. Style entire or 2-3-lobed.

Valeriana sedifolia, *d'Urv.* Plant forms small, dense cushions a few inches high, somewhat shrubby. Leaves overlapping, cylindrical, apices flat, narrowing towards base, thick and fleshy, with minute hairs. Flowers 3-7 at the top of branches, yellow. Male and female flowers on distinct plants. Corolla 5-lobed. Male flowers with 3 small barren stamens. Female flowers with rudimentary pistil.

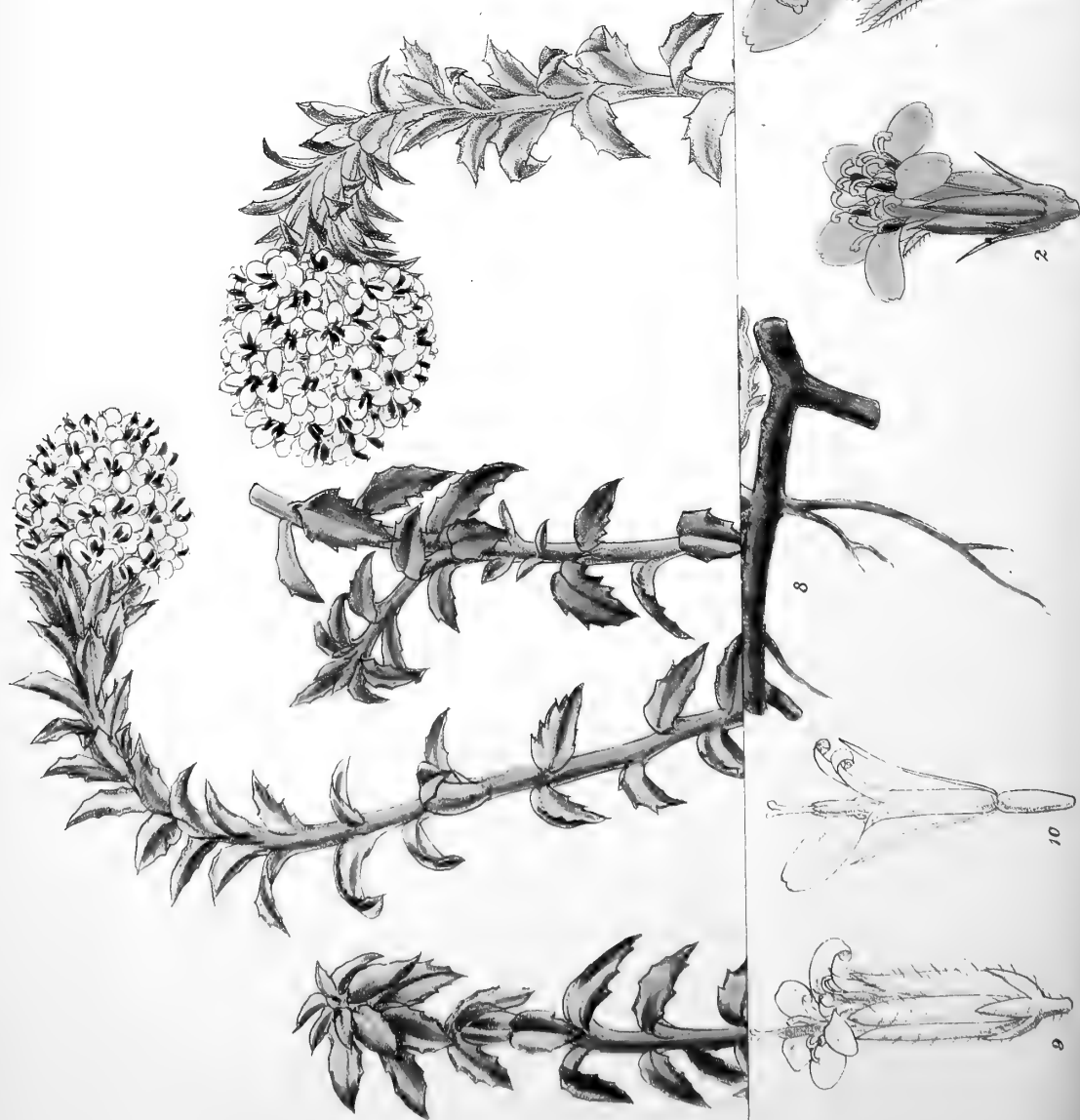
Only found on the highest mountains.

Flowers in December.

East and West Falklands.

Description of plate :—1 and 2, portions of plant ; 3, flower ; 4, corolla of male flower laid open ; 5, stamen ; 6, pistil. All except 1 enlarged.





1-7 *Nassauvia Gaudichaudii*, Cassini
8-12 *Nassauvia serpens*, d'Urv.

PLATE 27.

FIGS. 1-7.—*NASSAUVIA GAUDICHAUDII*.

Family, COMPOSITÆ:—Petal united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, *NASSAUVIA*:—Under shrubs, smooth or lightly hairy, with ascending leafy branches. Leaves alternate, overlapping, rigid, bearing stiff hairs. Flower heads not stalked, few flowered (3-5, or fewer). Corolla 2-lipped. Anthers with long tails. Fruit a smooth or hairy achene.

***Nassauvia Gaudichaudii*, Cassini.** Plant a few inches high. Stem woody, branched. Leaves $\frac{1}{4}$ in. long, narrow, apices acute, with spiny teeth. Flowers cream-coloured, scented. Pappus of broad pales.

On rocks near the sea. Fairly common.

East and West Falklands. Endemic.

This plant grows in irregular masses, 2-3 ft. in diameter, in sunny situations. These masses are densely covered from November to January with myriads of small, cream-coloured flowers of a sickly scent.

Description of plate:—1, portion of plant; 2, head of flowers; 3, flower; 4, flower laid open; 5, pappus; 6, style; 7, fruit. All except 1 enlarged.

FIGS. 8-12.—*NASSAUVIA SERPENS*.

Family, COMPOSITÆ:—As above.

Genus, *NASSAUVIA*:—As above.



1. 7 Nassauvia calliophylla C. & S. in.
8. 4 Nassauvia calliophylla C. & S. in.

PLATE 27.

FIGS. 1-7.—*NASSAUVIA GAUDICHAUDII*.

Family, COMPOSITÆ:—Petal united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, *NASSAUVIA*:—Under shrubs, smooth or lightly hairy, with ascending leafy branches. Leaves alternate, overlapping, rigid, bearing stiff hairs. Flower heads not stalked, few flowered (3-5, or fewer). Corolla 2-lipped. Anthers with long tails. Fruit a smooth or hairy achene.

***Nassauvia Gaudichaudii*, Cassini.** Plant a few inches high. Stem woody, branched. Leaves $\frac{1}{4}$ in. long, narrow, apices acute, with spiny teeth. Flowers cream-coloured, scented. Pappus of broad pales.

On rocks near the sea. Fairly common.

East and West Falklands. Endemic.

This plant grows in irregular masses, 2-3 ft. in diameter, in sunny situations. These masses are densely covered from November to January with myriads of small, cream-coloured flowers of a sickly scent.

Description of plate:—1, portion of plant; 2, head of flowers; 3, flower; 4, flower laid open; 5, pappus; 6, style; 7, fruit. All except 1 enlarged.

FIGS. 8-12.—*NASSAUVIA SERPENS*.

Family, COMPOSITÆ:—As above.

Genus, *NASSAUVIA*:—As above.

Nassauvia serpens, *d'Urv.* Plant 12-20 in. high. Stem creeping, shrubby, branches leafy along their whole length. Leaves rather over $\frac{1}{2}$ in. long, broadly ovate, margins toothed, erect or recurved, more or less silky. Heads 4-5-flowered, not stalked, and arranged in a dense, globular inflorescence. Corolla white. Stamens purple.

This handsome plant is peculiar to the Falkland Islands, and is almost confined to the stone-runs. Hooker says, "There the *Nassauvia serpens* grows, sending its brittle stems down amongst the masses of rock till they reach the soil, often at a considerable depth." "It pushes its serpentine growth upwards through the foliage of 'Fâchima' (*Chilietrichum amelloideum*) and has a most delicious scent, not unlike English lavender. The flowers, which are produced from December to January, are usually white, but occasionally a pale mauve specimen occurs" (Vallentin).

Description of plate:—8, whole plant; 9, head of flowers; 10, flower; 11, stamen; 12, pistil. All except 8 enlarged.



11774m JHP:loh

Senecio falklandicus, Hook. f.

PLATE 28.

SENECIO FALKLANDICUS.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, SENECIO:—A very large genus of herbs and undershrubs. Leaves scattered, rarely entire. Heads radiate, in clusters or solitary, usually yellow. Involucral bracts in series, often tipped with brown. Style branches spreading, usually tufted at the apex. Pappus consisting of several rows of soft, fine hairs.

Senecio falklandicus, *Hook. f.* Plant up to 2 ft. high, shrubby, branches, flower stalks and under surface of leaves densely woolly. Leaves narrow, spoon-shaped, margin entire or toothed, very pale greenish-white. Flower head about $1\frac{1}{2}$ in. in diameter, yellow. Involucral bracts broad, in 3 series, woolly at base.

Rocky shores, not uncommon.

Flowers December and January.

Description of plate:—1, portion of plant; 2, head of flowers; 3, section of head; 4, involucre and receptacle; 5, ray or outer flower; 6, pappus hair; 7, disc or inner flower; 8, section of disc flower; 9, fruit; 10, stigma. All except 1 enlarged.





EFV del JNF lith

Senecio littoralis, Gaud.

PLATE 29.

SENECIO LITTORALIS.

Family, COMPOSITÆ :—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, SENECIO :—A very large genus of herbs and undershrubs. Leaves scattered, rarely entire. Heads radiate, in clusters or solitary, usually yellow. Involucral bracts in series, often tipped with brown. Style branches spreading, usually tufted at the apex. Pappus consisting of several rows of soft, fine hairs.

Senecio littoralis, *Gard.* Plant about 9 in. high, erect, glabrous. Stem woody at base. Leaves not stalked, narrow, about $1\frac{1}{2}$ in. long, pointed, entire, bright, shining green. Involucral bracts about 20, narrow, with purplish-brown tips. Inflorescence showy, about $1\frac{1}{2}$ in. in diameter, bright yellow.

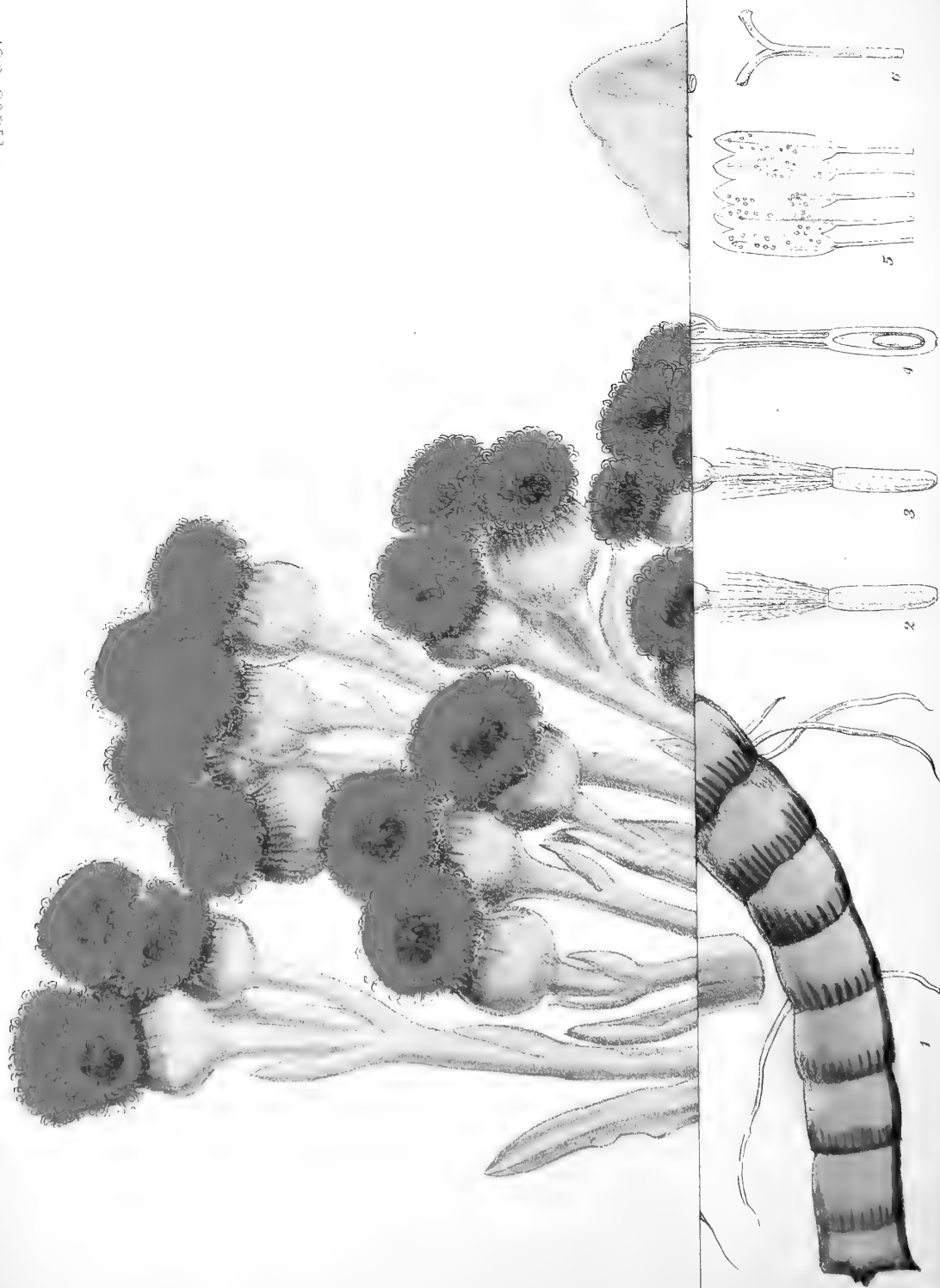
Marshes, quartzite ridges, stony slopes and mountain sides, associated with *Blechnum magellanicum*. Abundant.

Flowers November—December.

East and West Falklands. Endemic.

Description of plate :—1, portion of plant ; 2, involucre and receptacle ; 3, ray flower ; 4, disc flower ; 5, section of disc flower ; 6, stigma ; 7, fruit. All except 1 enlarged.





EFVdel JNF hsh

Senecio candidans DC.

PLATE 30.

SENECIO CANDICANS.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, SENECIO:—A very large genus of herbs and undershrubs. Leaves scattered, rarely entire. Heads radiate, in clusters or solitary, usually yellow. Involucral bracts in series, often tipped with brown. Style branches spreading, usually tufted at the apex. Pappus consisting of several rows of soft, fine hairs.

Senecio candicans, DC. Plant up to 3 ft. high, herbaceous, erect, woolly. Leaves with broad, sheathing stalks, ovate, margins scalloped, silvery, upper leaves with no stalks, narrower and entire. Inflorescences or flower heads in umbels, each head on a long, woolly stalk. Involucral bracts narrow, pointed. Pappus hairs barbed.

Sandy beaches. Common.

Flowers in January.

East and West Falklands.

Description of plate:—1, whole plant; 2, flower bud; 3, flower; 4, section of flower; 5, stamens laid open; 6, stigma; 7, fruit. All except 1 enlarged.



PLATE 30.

SENECIO CANDICANS.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, SENECIO:—A very large genus of herbs and undershrubs. Leaves scattered, rarely entire. Heads radiate, in clusters or solitary, usually yellow. Involucral bracts in series, often tipped with brown. Style branches spreading, usually tufted at the apex. Pappus consisting of several rows of soft, fine hairs.

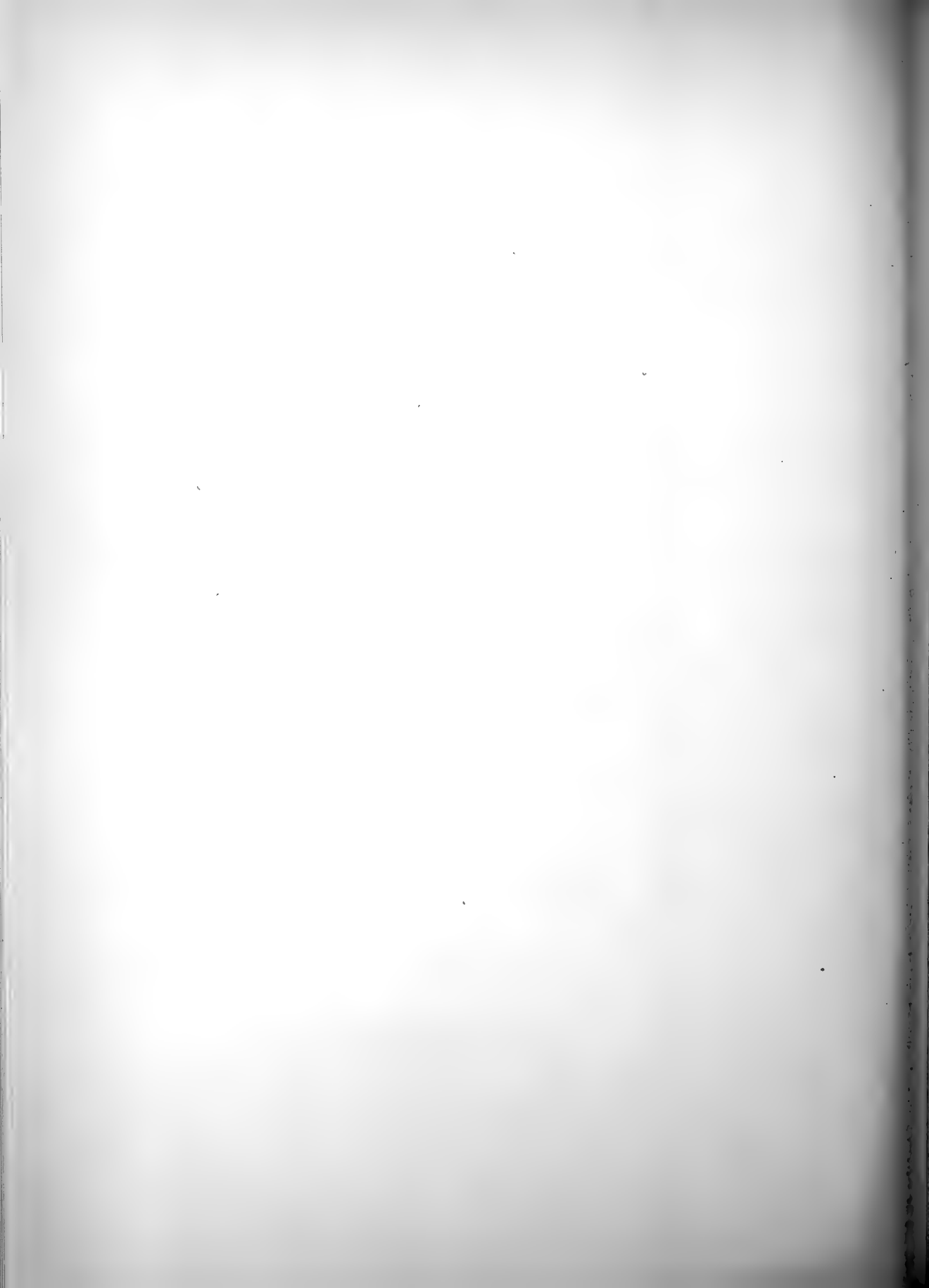
Senecio candicans, DC. Plant up to 3 ft. high, herbaceous, erect, woolly. Leaves with broad, sheathing stalks, ovate, margins scalloped, silvery, upper leaves with no stalks, narrower and entire. Inflorescences or flower heads in umbels, each head on a long, woolly stalk. Involucral bracts narrow, pointed. Pappus hairs barbed.

Sandy beaches. Common.

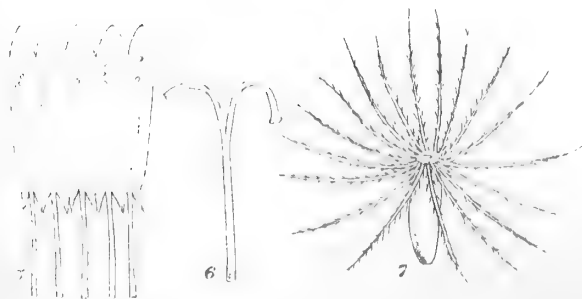
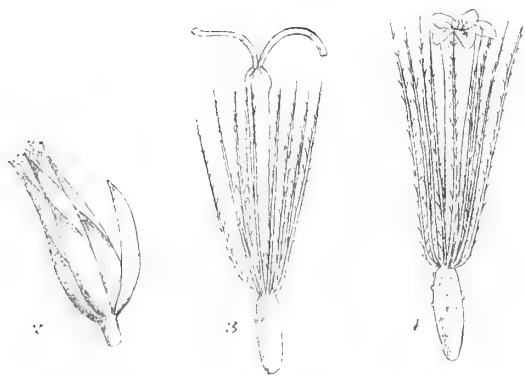
Flowers in January.

East and West Falklands.

Description of plate:—1, whole plant; 2, flower bud; 3, flower; 4, section of flower; 5, stamens laid open; 6, stigma; 7, fruit. All except 1 enlarged.

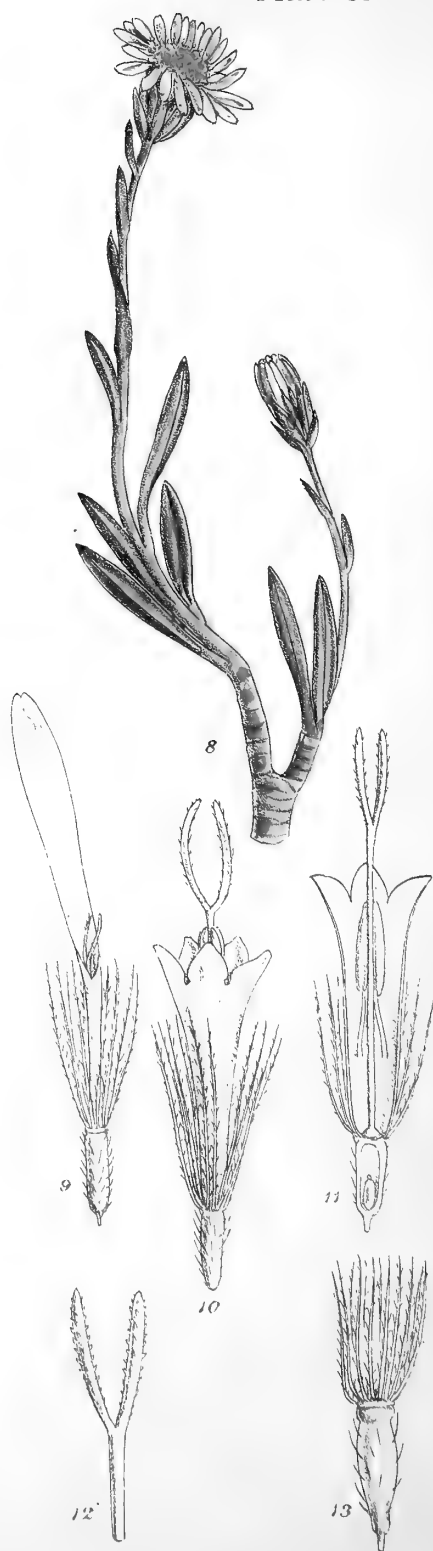






REV. J. J. J. J. J. J.

Gnaphalium affine d'Urv.



Aster VahlII d'Urv.

PLATE 31.

FIGS. 1-7.—GNAPHALIUM AFFINE.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, GNAPHALIUM (*Cud-weed*):—Herbs, with woolly alternate leaves. Inflorescences, or heads of tubular pistillate and perfect flowers, clustered in terminal or axillary bunches. Involucral bracts in series, adpressed, coloured. Anthers tailed. Pappus one row of silky hairs.

Gnaphalium affine, *d'Urv.* Plant about 3 in. high, sparsely covered with woolly hairs. Stem slender, procumbent, leafy below, flowering branches 2-3 in. long, upright and sparsely leafy. Leaves almost spatulate, hairy on both sides, $\frac{1}{4}$ - $\frac{1}{2}$ in. long. Heads 3-5, terminal, narrow. Involucral bracts very pointed, shining above the middle, chestnut-brown, woolly.

Near sea or streams, in grass and on heaths. Not uncommon.

Flowers in January.

East and West Falklands.

Description of plate:—1, whole plant; 2, flower head; 3, pistillate flower; 4, perfect flower; 5, stamens laid open; 6, stigma; 7, fruit. All except 1 enlarged.

FIGS. 8-13.—ASTER VAHLII.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, ASTER (*Starwort*) :—Herbaceous, usually erect. Leaves scattered, simple, entire or toothed. Heads terminal, outer florets purple, blue or white, forming a spreading ray, disc florets yellow, tubular and 5-toothed. Involucral bracts in several series, overlapping, herbaceous. Anthers without tails. Pappus of many rows of stiff hairs.

Aster VahlII, *Hook. et Arn.* (Marsh Daisy.) Plant about 4 in. high, smooth. Stem simple, erect. Leaves narrowly ovate, widening below, pointed, sheathing at the base. Heads nearly 1 in. in diameter. Ray florets in several series, at first white, later becoming tipped with brilliant rose. Disc florets yellow. Involucral bracts hairy. Style branches feathery. Pappus dull white. Fruit hairy.

On marshy ground. Formerly abundant, now more rare.
Flowers November and December.

Description of plate :—8, portion of plant ; 9, ray floret ; 10, disc floret ; 11, section of disc floret ; 12, stigma ; 13, fruit. All except 8 enlarged.

Errata :—Plate 31, *d'Urv.* should be *Hook. et Arn.*



E.F.V. del J.N.F. hch

Gnaphalium purpureum L.

PLATE 32.

GNAPHALIUM PURPUREUM.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, GNAPHALIUM (*Cud-weed*):—Herbs, with woolly alternate leaves. Inflorescences, or heads of tubular pistillate and perfect flowers, clustered in terminal or axillary bunches. Involucral bracts in series, adpressed, coloured. Anthers tailed. Pappus one row of silky hairs.

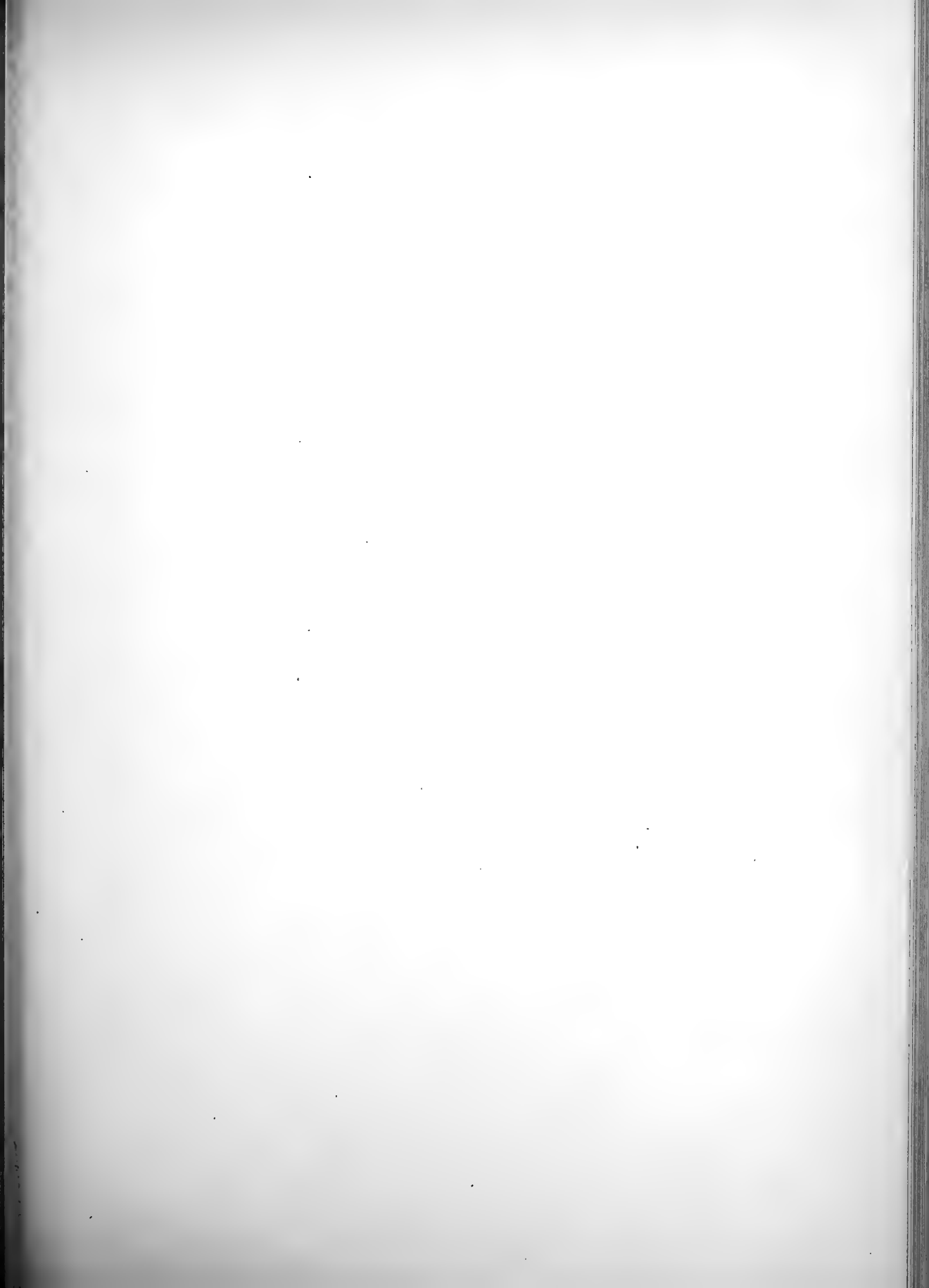
Gnaphalium purpureum, L. Plant about 4–12 in. high. Stem erect, not branched, uniformly leafy throughout its length. Leaves narrowly spoon-shaped, hairy below, upper ones more oblong and not stalked, lower sometimes with a stalk. Inflorescences not stalked, in axils of upper leaves. Involucral bracts bronze-coloured or purplish, woolly at base, narrowly oblong. Pappus hairs united at base.

Dry ground near sea. Fairly common.

East and West Falklands.

Description of plate :—1, whole plant ; 2, flower head ; 3, female or outer flower ; 4, hermaphrodite or inner flower ; 5, stamens and pistil ; 6, stigma ; 7, fruit. All except 1 enlarged.







EFV del JNF lith

Chiotrichum diffusum Forst. Reiche.

PLATE 33.

CHILIOTRICHUM DIFFUSUM.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Florets in heads. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, CHILIOTRICHUM:—Shrubs. Leaves alternate, entire, narrow, whitish and woolly on lower surface. Heads with long stalks, the ray florets white or purple. Involucral bracts campanulate, dry, margins scarious. Style branches flat. Pappus hairs in 2 or 3 series, unequal in length.

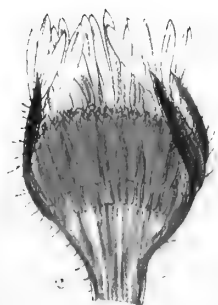
Chiliotrichum diffusum, (*Forst.*) *Reiche*. (“Fâchima.”)

Plant attains a height of 5 ft. or more. Leaves oblong, margins revolute, entire, dark green, whitish and hairy below. Heads about $1\frac{1}{4}$ in. in diameter, ray florets white, disc yellow.

Flowers January and February.

This plant is the tallest found in the Falkland Islands with the exception of *Veronica elliptica*. It has a curious aromatic scent. “Abundant in East and West Falklands, but needing shelter to be well developed, then often forming brushwood of a man’s height. The brooks are often lined with a greyish-green border of *Chiliotrichum*” (*Skottsberg*).

Description of plate:—1, portion of plant; 2, ray flower; 3, disc flower; 4, stamens; 5, pollen; 6, stigma; 7, fruit. All except 1 enlarged.



F. M. del. J. N. F. lith.

Erigeron incertus (d'Urv.) Skottsb.

PLATE 34.

ERIGERON INCERTUS.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

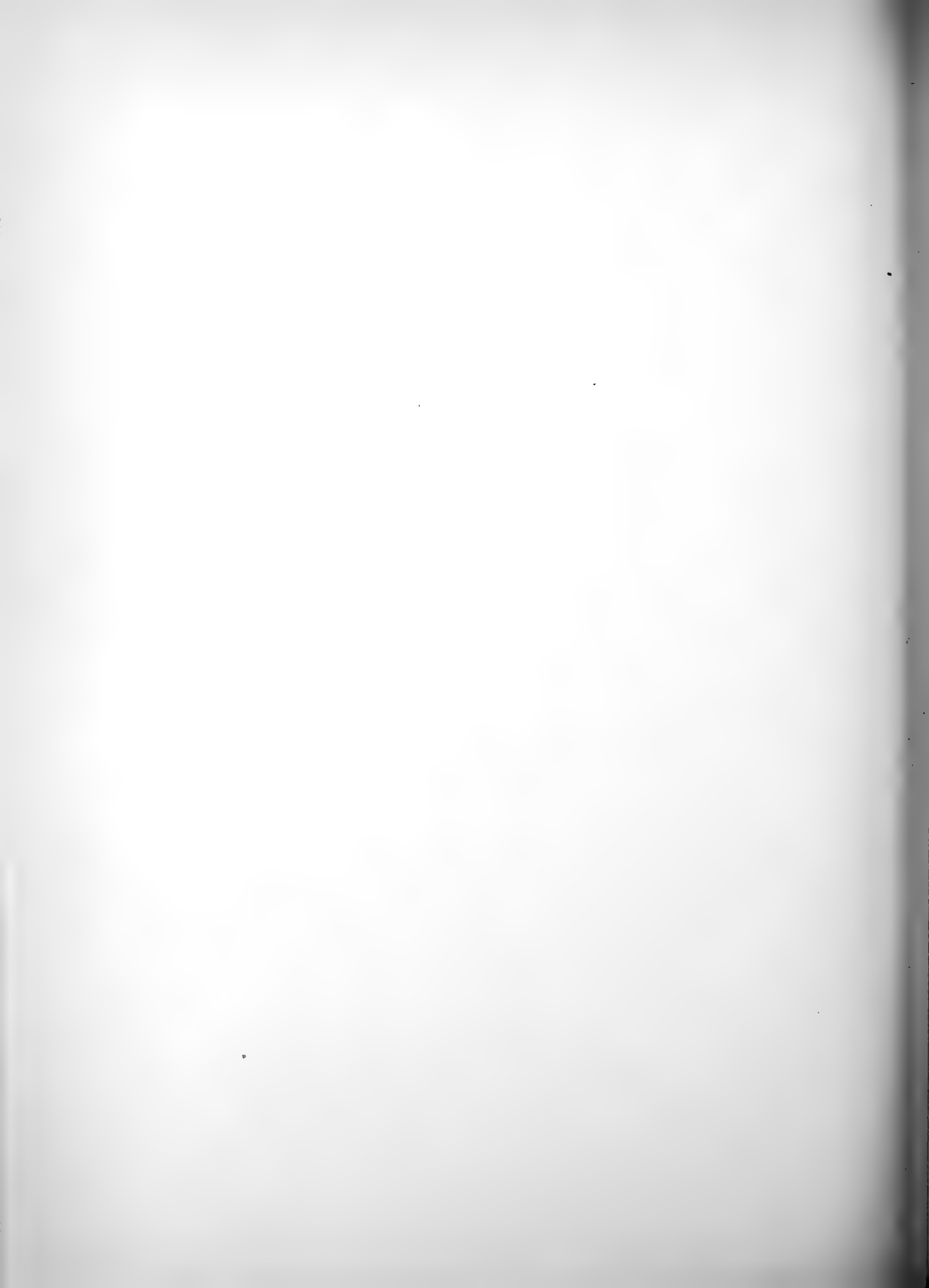
Genus, ERIGERON (*Fleabane*):—Herbs. Leaves alternate, often in a cluster at base. Very like Aster, differing mainly in having more numerous and narrower involucre bracts and ray florets.

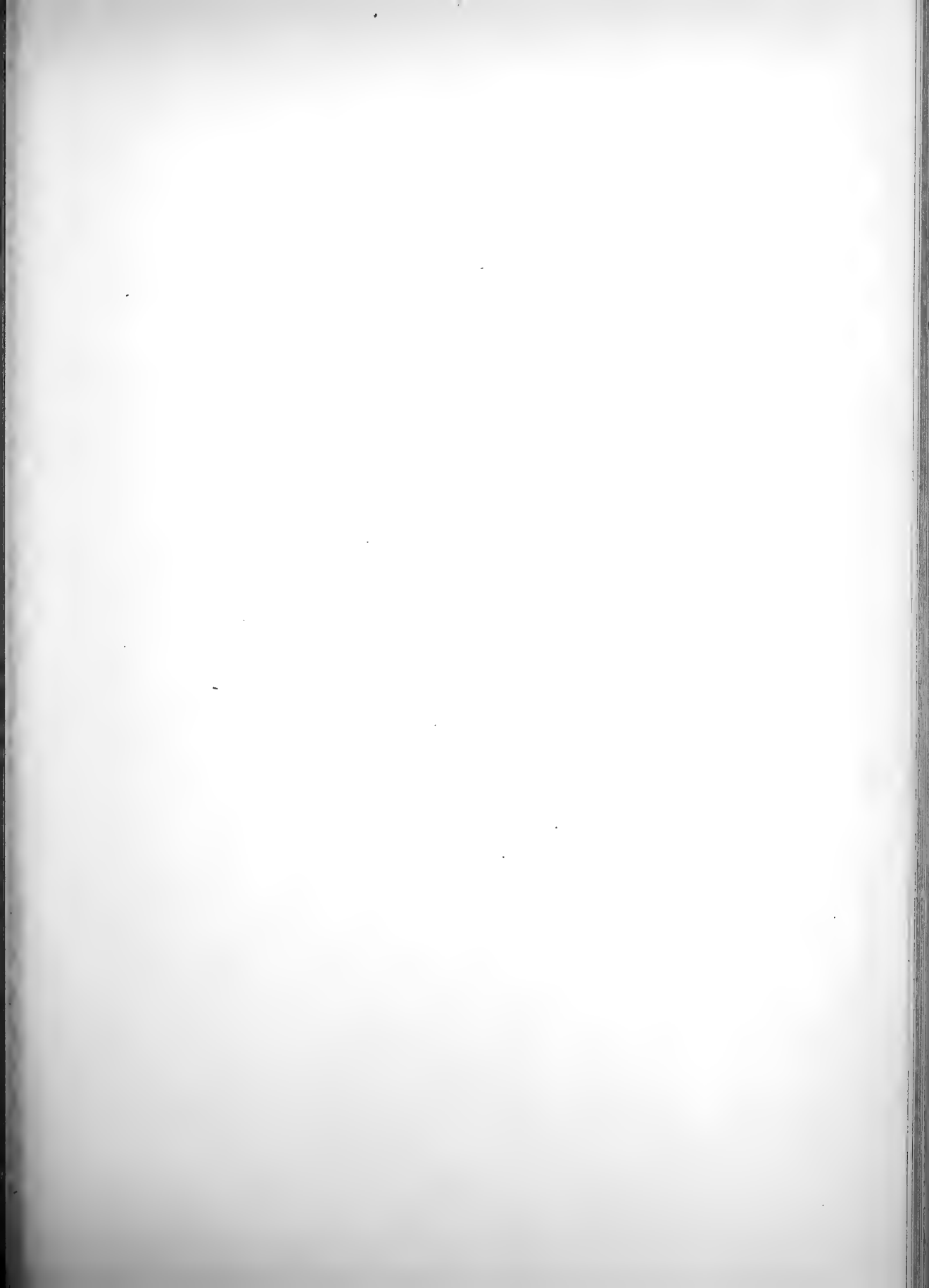
Erigeron incertus, (*d'Urv.*) *Skotts.*, E. Sullivan, *Hook. f.*
Plant about 3 or 4 in. high, hairy. Stem erect, with a few narrow leaves. Leaves mostly arranged in a rosette at the base of the stem, entire, ovate, with somewhat rounded apices. Flower heads solitary and terminal. Involucre bracts hairy. Flowers white.

Dry places. Rare.

East and West Falklands.

Description of plate:—1, whole plant; 2, section of flower head; 3, ray flower; 4, disc flower; 5, disc flower opened; 6, stamens; 7, stigma; 8, fruit. All except 1 enlarged.







EFV. del. JN F. lith

Baccharis magellanica, Pers.

PLATE 35.

BACCHARIS MAGELLANICA.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, BACCHARIS:—Shrubs, usually glabrous. Leaves alternate, entire or toothed. Heads small or medium-sized. Fertile flowers always female, sterile flowers hermaphrodite. Involucral bracts in many series, overlapping, dry. Style in hermaphrodite flowers branched, pappillose or hairy. Pappus hairs slender, copious, in 1-many series, fewer in sterile flowers.

Baccharis magellanica, *Pers.* ("Christmas.") Plant about 8 in. high, a low under-shrub growing with *Empetrum rubrum*. Leaves rather variable in size and may be entire or toothed, usually about $\frac{1}{2}$ in. long, not stalked, wedge-shaped, crowded, evergreen. Heads not stalked, small, terminal, solitary, yellowish-white. Involucral bracts ovate, margins hairy. Fruit smooth.

Abundant everywhere in both islands.

Flowers December—January.

Description of plate:—1, portion of male plant; 2, flower head and foliage; 3, involucre and receptacle; 4, bud of male flower; 5, male flower; 6, stamens; 7, portion of female plant; 8, flower head and foliage; 9, female flower; 10, stigma; 11, fruit; 12, pappus hair. All except 1 and 7 enlarged.





E.F.V. del. J.N.F. lith

Leuceria gossypina, Hook. et Arn.

PLATE 36.

LEUCERIA GOSSYPINA.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, LEUCERIA:—Annual or perennial herbs, more or less covered with white, woolly hairs. Leaves springing from root or stem, often indented or dissected. Head radiate, medium-sized, or small, on a long stalk or solitary on a simple stem, homogamous, hermaphrodite flower always fertile. Corolla 2-lipped, one lip 3-toothed. Involucral bracts broad, pointed, in a few series, overlapping, herbaceous. Anthers long-tailed. Style branches with truncated apices. Fruit hairy. Pappus hairs in 1 series, barbed.

Leuceria gossypina, *Hook. et Arn.* *Leuceria suaveolens*, (*d'Urv.*) *Hook. et Arn.* ("Vanilla Daisy.") Plant 6–12 in. high, woolly. Stem simple, leafy, 1-flowered, hairy. Leaves, those springing from the root have long stalks, are 3–4 in. long and deeply indented, the segments having rounded apices. The cauline leaves are entire, narrow, and about 1 in. long. Head terminal about 2 in. in diameter, white, tinged with yellow, scent resembling that of vanilla. Involucral bracts nearly as long as the flowers, narrow. Styles pale lilac.

Sheltered localities in heath. Not uncommon.

Flowers December and January.

East and West Falklands. Endemic.

Description of plate:—1, plant; 2, ray floret; 3, floret opened; 4 and 5, stamens; 6, stigma; 7, fruit. All except 1 enlarged.





E.F.V. del. J.B.F. scul.

Perezia recurvata, (Vahl) Less.

PLATE 37.

PEREZIA RECURVATA.

Family, COMPOSITÆ:—Petals united. Corolla bearing the stamens. Anthers united in a ring round the style. Ovary 1-celled. Fruit 1-seeded.

Genus, PEREZIA:—Usually erect, branched herbs, not often shrubby. Leaves radical or alternate, entire or sometimes dissected, often spiny. Heads solitary and terminal, rarely clustered. Involucral bracts in 2—many overlapping series. Flowers all alike and perfect, purple, rose, blue or white. Corolla 2-lipped, the outer lip being the longer and 3-toothed. Anthers arrow-shaped at base with long, narrow tails. Style branched and hairy above. Fruit an oblong achene, hairy. Pappus in several rows, scabrid.

***Perezia recurvata*, (Vahl) Less.** (Called “lavender” in the Falkland Islands.) Plant perennial, usually 4–10 in. high. Stem somewhat shrubby, densely clothed with leaves. Leaves tough, about 1 in. long, rounded at apex, recurved, dilated at base and clasping the stem, very spiny, and transversely wrinkled. Head about an inch in diameter, the flower stalk naked except for a few bracts. Involucral bracts in 3 rows, the outer with spiny hairs. Florets deep blue, lilac or white, very fragrant. Anthers blue at apex, yellow below. Stigma white. Fruit slightly hairy.

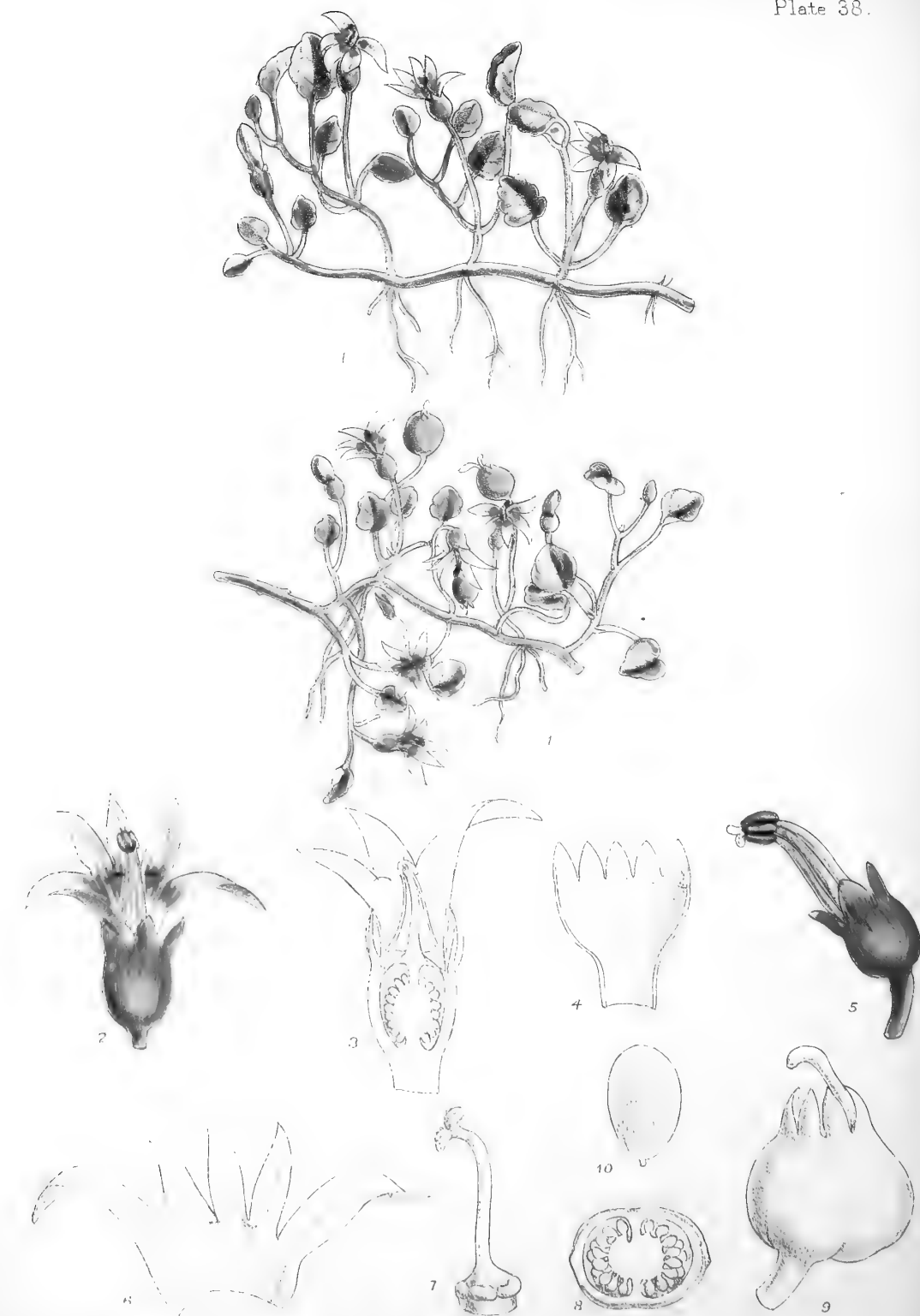
Flourishes near the sea, in peaty soil among rocks and on sandy shores.

Flowers December and January.

East and West Falklands.

Description of plate:—1, portion of plant; 2, ray floret; 3, stamen; 4, stigma; 5, ovary. All except 1 enlarged.





del. J. N. P. H. B.

Pratia, repens, Gaud.

PLATE 38.

PRATIA REPENS.

Family, CAMPANULACEÆ :—Petals united. Stamens free from the corolla. Leaves alternate. Stamens as many as corolla lobes. Sepals 5. Petals 5. Ovary multilocular.

Genus, PRATIA :—Slender herbs, prostrate or creeping, rarely erect. Leaves alternate, broad, toothed. Flower stalk axillary, 1-flowered. Flowers small, male and female flowers often on different plants and sterile. Calyx 5-lobed, lobes sometimes unequal, absent in male flowers. Corolla dorsally divided to the base, lobes unequal. Stamen tube free from corolla or joined to it at the base. Anthers 5, 2-tufted or with awns. Stigma shortly 2-lobed. Fruit a berry, surmounted by the calyx.

Pratia repens, *Gaud.* Plant about 2 in. high, creeping. Leaves long-stalked, kidney-shaped or orbicular, edges waved. Flower stalk about $\frac{3}{4}$ in. long, bearing 2 or 3 small bracts. Calyx tube globose, lobes ovate and pointed. Corolla bright lilac, white inside. Anthers lilac, filaments dark violet. Seeds yellowish-brown.

Swamps, banks of streams, etc. Forming dense mats in moist places.

Flowers December.

East and West Falklands.

Description of plate :—1, whole plants in flower and fruit ; 2, flower ; 3, section of flower ; 4, calyx laid open ; 5, flower with petals removed ; 6, corolla ; 7, style and stigma ; 8, section of ovary ; 9, fruit ; 10, seed. All except 1 enlarged.





EFV. del. JNElth.

Pernettya pumila, (Linn.f.) Hook.

PLATE 39.

PERNETTYA PUMILA.

Family, ERICACEÆ :—Shrubs. Petals united. Stamens free from the corolla, usually twice as many as the corolla lobes. Anthers opening by pores.

Genus, PERNETTYA :—Shrubby, hairy or smooth. Leaves small, usually toothed, alternate, tough, shortly stalked. Flowers small, solitary, axillary or in axillary inflorescences with scaly bracts, white or pink. Calyx 5-partite. Corolla urn-shaped or globose. Disc 5- or 10-lobed. Stamens 10. Anthers opening by an apical pore. Fruit a berry, globose, 5-celled, many-seeded.

Pernettya pumila, (*Linn. fil.*) *Hook.* A low, smooth plant, erect or prostrate, up to 2 ft. in length, much branched. Leaves not stalked, ovate, apices pointed or rounded. Flower stalk longer than leaves, axillary, 1-flowered. Flowers white. Anthers tailed. Ovary 5-lobed. Ovules many.

Very common everywhere.

Flowers November.

East and West Falklands.

Description of plate :—1, portion of plant ; 2, flower ; 3, section of corolla ; 4, stamens and pistil ; 5, stamen ; 6, pistil ; 7, section of ovary ; 8, portion of plant in fruit. All except 1 and 8 enlarged.





E. V. del. J. N. Flith.

Gaultheria microphylla, (Forst) Hook. fil

PLATE 40.

GAULTHERIA MICROPHYLLA.

Family, ERICACEÆ:—Petals united. Stamens free from the corolla, usually twice as many as the corolla lobes. Anthers opening by pores. Shrubs.

Genus, GAULTHERIA:—Shrubby, erect or decumbent, often with stiff hairs. Leaves alternate, evergreen, tough. Flowers small, axillary or in axillary inflorescences, with or without bracts, white or pink. Calyx 5-lobed or 5-partite, persistent. Corolla 5-lobed, urn-shaped or bell-shaped, lobes recurved. Stamens 10, joined to base of corolla. Anthers opening by an apical pore. Ovary 5-celled, ovules many. Seeds minute. Fruit a capsule, edible.

Gaultheria microphylla, (*Forst.*) *Hook. f.* (Mountain Berry.) A small branched plant, 3–4 in. high, sparsely covered with hairs. Leaves broadly ovate, or oblong, margins thick, obscurely toothed. Flowers solitary on a recurved stalk, small. Corolla white. Fruit red or white. As will be seen from the drawings, this fruit is very variable.

Heaths. Not common.

Flowers November—January.

East and West Falklands.

Description of plate:—1, portions of plant in fruit; 2, fruit; 3 and 4, sections of fruit; 5, seed; 6, a globose fruit; 7, section of fruit; 8, section of ripe ovary; 9, seed. All except 1 enlarged.



E. F. V. del., M. K. lith.

Primula farinosa, var. *megellanica*, Hook. f.

PLATE 41.

PRIMULA FARINOSA, VAR. MAGELLANICA.

Family, PRIMULACEÆ:—Petals united. Ovary superior. Stamens epipetalous, equal to and opposite the corolla lobes. Flowers pentamerous. Placenta free-central.

Genus, PRIMULA:—Herbaceous plants with an underground stem. Leaves basal, simple. Flowers solitary, or in clusters on a leafless stalk. Calyx tubular, 5-lobed. Corolla salver- or funnel-shaped, with a long tube, 5-lobed, each lobe notched. Stamens 5, inserted on petals. Stigma capitate. Fruit a capsule, opening into 5 teeth.

This genus is peculiar owing to the fact that it possesses 2 forms of flowers, long-styled and short-styled.

Primula farinosa, L., var. **magellanica**, Hook. f. Plant about 7 in. high. Leaves spoon-shaped or ovate, narrowing gradually into a stalk, usually about $1\frac{1}{4}$ in. long, but often larger, margins scalloped, green above, whitish and mealy beneath. Flower stalk very much longer than, and standing up from, the leaves. Flowers in a globose head, white, with a yellow "eye," sometimes tinged with lavender. Calyx teeth pointed. Corolla tube longer than calyx, limb $\frac{1}{2}$ – $\frac{3}{4}$ in. in diameter. Style green. Stigma yellow.

Hillsides, etc. Fairly common.

Flowers October and November.

East and West Falklands.

Description of plate:—1, whole plant; 2, section of flower; 3, calyx; 4, section of calyx and pistil; 5, section of corolla; 6, pistil; 7, fruit; 8, seed. All except 1 enlarged.

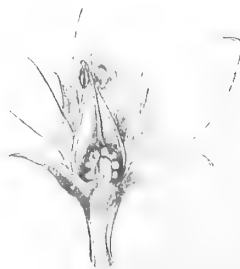
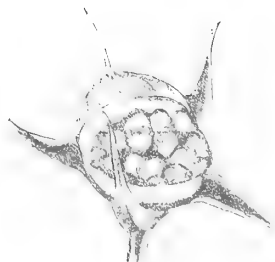


PLATE 42.

ANAGALLIS ALTERNIFOLIA, var. DENSIFOLIA.

Family, PRIMULACEÆ:—Petals united. Ovary superior. Stamens epipetalous, equal to and opposite the corolla lobes. Flowers pentamerous. Placenta free-central.

Genus, ANAGALLIS (*Pimpernel*):—Herbaceous creeping plants. Leaves opposite and entire. Flowers opposite and axillary, on very slender stalks. Calyx deeply 5-cleft. Corolla rotate or funnel-shaped. Stamens 5, filaments hairy. Fruit a capsule, splitting transversely all round.

Anagallis alternifolia, var. **densifolia**, *Hook. f.*

Plant annual, branched. Leaves ovate, wider above, tapering below, about $\frac{1}{4}$ in. long, somewhat fleshy, smooth, leaf stalk very short or absent. Flowers solitary in the axils of the leaves, shortly stalked. Calyx teeth narrow, pointed, pale green. Petals longer than the sepals, pale pink, 7-veined. Stamens 5, filaments white, joined for half their length, with glands at the base. Ovary round. Ovules numerous. Capsule large, greyish-brown.

Moist places, meadows, heaths, etc. Uncommon.

Flowers January.

East and West Falklands.

Description of plate:—1, portion of plant; 2, flower; 3, section of flower; 4, calyx and pistil; 5, petal and stamen; 6, pistil; 7, fruit; 8, seed. All except 1 enlarged.





E.F.V. del., M.R. lith.

Armeria macloviana, Cham.

PLATE 43.

ARMERIA MACLOVIANA.

Family, PLUMBAGINACEÆ:—Petals united. Ovary superior. Stamens epipetalous, equal to and opposite the corolla lobes. Flower pentamerous. Calyx persistent. Leaves narrow, glandular.

Genus, ARMERIA (*Thrift*):—A genus of maritime plants. Leaves all springing from the root, very narrow. Flowers arranged in dense globular heads, with scaly bracts. Petals united at the very base. Styles hairy.

Armeria Macloviana, *Cham.* Plant about 6 in. high. Leaves in tufts, grass-like, about $1\frac{1}{2}$ –3 in. long and very narrow, entire, fleshy, smooth, dark green, with lighter vein down centre. Flowers in heads, surrounded by bracts, placed terminally at the end of a long leafless stalk. Calyx funnel-shaped, toothed, outer side pink, inner mauvish-pink. Petals 5, distinct, rose pink, entire, oblong. Stamens 5. Anthers green. Filaments pink. Style divided into 5 branches, whitish above, pink and barbed below. Ovary green.

Seashores. Not common.

Flowers December and January.

East and West Falklands.

Description of plate:—1, whole plant; 2, section of flower; 3, calyx; 4, flower with calyx removed; 5, petal and stamen; 6 and 7, stamens; 8, pistil. All except 1 enlarged.



E.F.V. del., M.R. lith.

Gentiana magellanica, Gaud.

PLATE 44.

GENTIANA MAGELLANICA.

Family, GENTIANACEÆ:—Petals united. Ovary superior. Stamens epipetalous, equal to and opposite the corolla lobes. Corolla contorted. Leaves opposite, entire.

Genus, GENTIANA (*Gentian*):—Herbaceous plants. Leaves opposite, not stalked. Flowers solitary and terminal or in clusters. Calyx tubular, 4- or 5-lobed. Corolla funnel-shaped or salver-shaped with spreading limb, 4- or 5-lobed. Stigmas 2. Fruit a 1-celled capsule.

Gentiana magellanica, *Gard.* Plant erect, about 6 in. high. Stem tetragonal. Leaves about 1 in. long, spoon-shaped or oblong, pointed, lower leaves with more rounded apices. Flowers stalked. Calyx nearly as long as corolla, deeply divided into 5 oblong lobes, pale green. Corolla 5-lobed, contorted, white or pale lilac. Stamens inserted on corolla tube. Anthers mauve. Style short. Stigma white. Fruit a many-seeded capsule, opening longitudinally.

Dampish places, heath, etc. Not common.

Flowers in February.

Description of plate:—1, whole plants; 2, flower; 3, calyx; 4, corolla laid open; 5 and 6, stamens; 7, ovary; 8, fruit; 9, seed. All except 1 enlarged.





E.F.V. del., M.R. lith.
Calceolaria Darwinii, Benth.

Euphrasia antarctica, Benth.

PLATE 45.

FIGS. 1-9.—EUPHRASIA ANTARCTICA.

Family, SCROPHULARIACEÆ :—Petals united. Ovary superior. Stamens epipetalous, 2 or 4, if 4 in pairs. Ovary 2-celled. Flowers irregular.

Genus, EUPHRASIA (*Eye-bright*) :—Herbaceous, usually annual plants, partially parasitic on the roots of other plants. Leaves opposite. Corolla 2-lipped, the upper lip divided into 2 spreading lobes, the lower lip divided into 3 nearly equal lobes. Anthers spurred at base. Fruit a capsule, with numerous ribbed seeds.

Euphrasia antarctica, *Benth.* A very small, hairy plant, often rosette-like in habit and not exceeding an inch in height. Stem erect, simple or branched. Leaves wedge-shaped, trifid, lobes short and rounded. Flowers situated among the leaves, not stalked. Calyx tube 4-lobed, bell-shaped or tubular, lobes hairy at the apex, green with brown tips. Corolla tube white to pale lilac, the inner part of lower lip being yellow and each lobe having a dark violet streak. Anthers, each lobe having a tail at base, brown. Filaments white. Ovary green. Stigma light-brownish. Style white. Capsule ovate and flattened.

In moist places among grasses. Rare.

Flowers in January and February.

East Falklands.

Description of plate :—1, whole plant ; 2, flower ; 3, part of calyx ; 4, section of flower with calyx removed ; 5 and 6, stamens ; 7, pistil ; 8, fruit ; 9, seed. All except 1 enlarged.

FIG. 10.—CALCEOLARIA DARWINII.

Family, SCROPHULARIACEÆ :—As above.

Genus, CALCEOLARIA :—Usually herbaceous plants, sometimes shrubby. Leaves opposite or in whorls, rarely alternate. Flower stalks

axillary and terminal, usually more than 1-flowered. Flowers conspicuously irregular. Calyx short, slightly adhering to ovary, 4-partite. Corolla 2-lipped, lips entire, concave, anterior lip large and inflated; yellow, white or purplish. Stamens 2. Stigma small. Capsule ovate-conical. Seeds numerous.

Calceolaria Darwinii, *Benth.* Plant 7 or 8 in. high, quite smooth. Leaves $1\frac{1}{2}$ –2 in. long, broadly oblong, gradually narrowing to the base, entire or having a few teeth. Flower stalk about 4 in. long, 1–3-flowered (usually 1-flowered). Flower larger than that of *C. Fothergillii*, entirely yellow (Wright), or red-spotted (Macloskie). Calyx with broad, rounded segments. Corolla—upper lip as long as calyx, lower lip very large, contracted at base, open below the middle. Anther lobes ovate.

Round beach, growing near *Aspidium coriaceum*. Very rare.

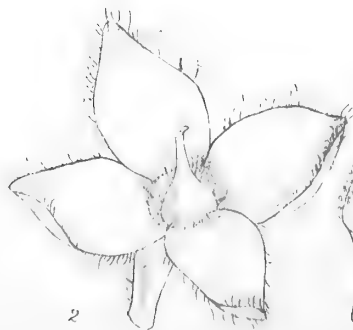
Flowers November and December.

West Falklands.

Plate 45, Fig. 10 :—Whole plant.



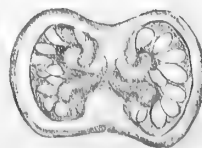
1



2



3



4



6



5

E.F.V. del., M.R. lith.

Calceolaria Fothergillii, Ait.

PLATE 46.

CALCEOLARIA FOTHERGILLII.

Family, SCROPHULARIACEÆ :—Petals united. Ovary superior. Stamens epipetalous, 2 or 4, if 4 in pairs. Ovary 2-celled. Flowers irregular.

Genus, CALCEOLARIA :—Usually herbaceous plants, sometimes shrubby. Leaves opposite or in whorls, rarely alternate. Flower stalks axillary and terminal, usually more than 1-flowered. Flowers conspicuously irregular. Calyx short, slightly adhering to ovary, 4-partite. Corolla 2-lipped, lips entire, concave, anterior lip large and inflated, yellow. Stamens 2. Stigma small. Capsule ovate-conical. Seeds numerous.

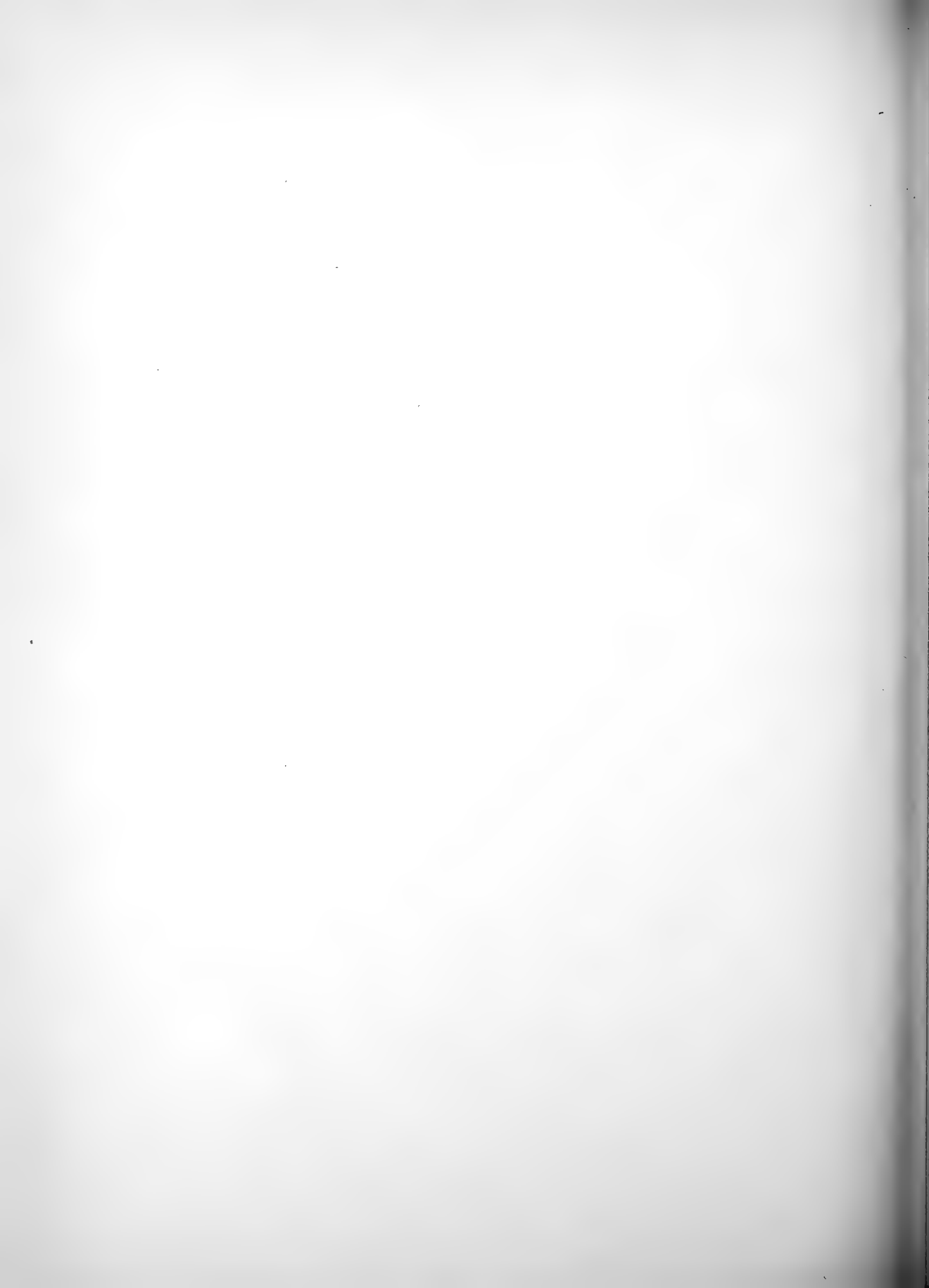
Calceolaria Fothergillii, *Ait.* (Lady's Slipper.) Plant very hairy, erect, about 5 in. high. Stem short. Leaves spoon-shaped or ovate, about 1 in. long, entire, covered with hairs, shortly stalked. Flowers solitary, on long, hairy stalks. Sepals 5, resembling leaves in shape. Corolla—upper lip shorter than the sepals, yellow, lower lip much larger, open below the middle. The colour of the lower lip varies from yellow with red spots or patches to a beautiful dark red with only a yellow area.

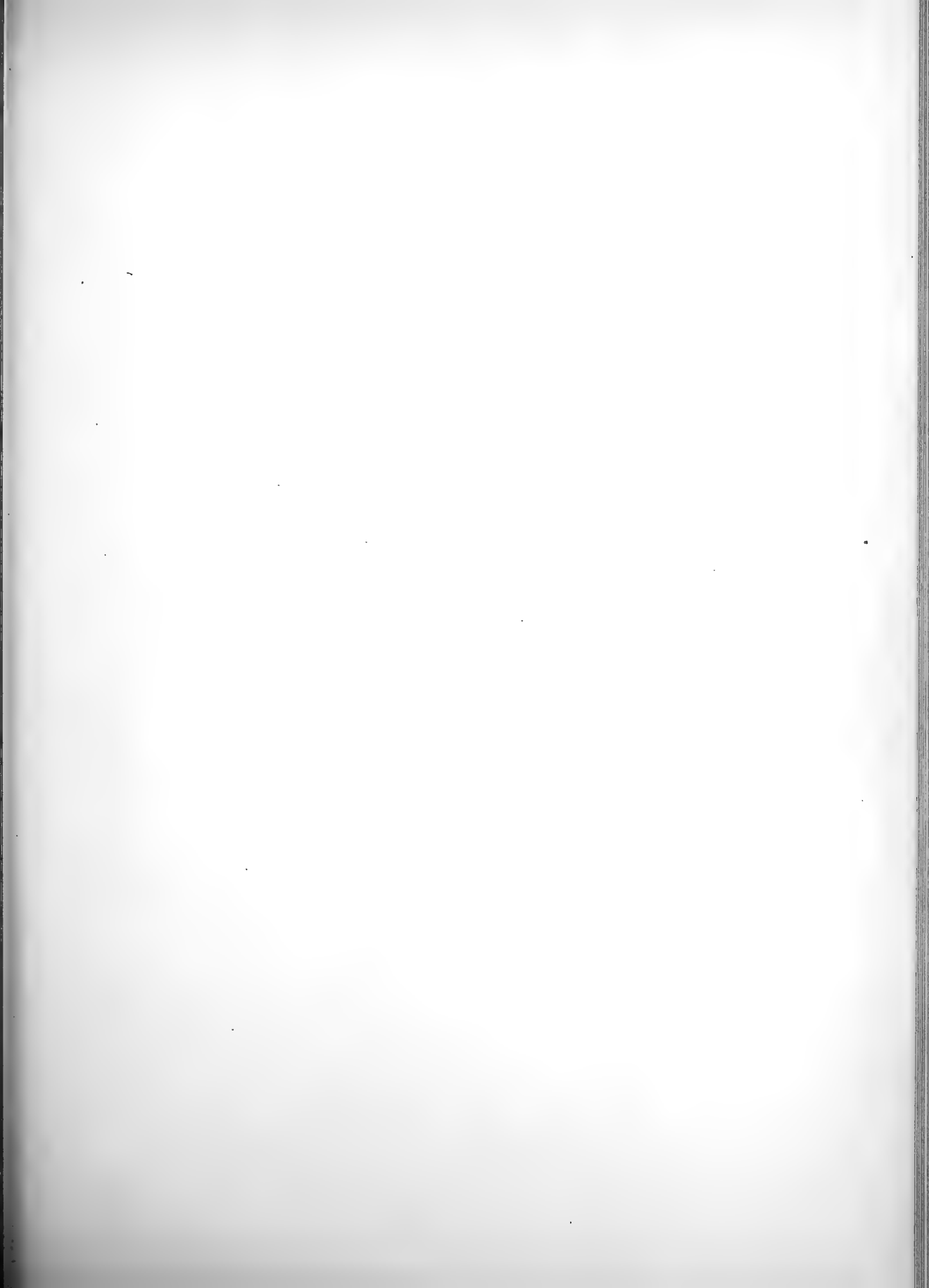
Slopes or banks near the sea, growing with *Sisyrinchium*, *Oxalis*, and *Viola maculata*. In Hooker's time this plant was very abundant, at the present time it is more or less rare.

Flowers December and January.

East and West Falklands.

Description of plate :—1, whole plants ; 2, calyx and pistil ; 3, part of corolla and stamens ; 4, section of ovary ; 5, seed ; 6, ripe seed. All except 1 enlarged.







E.F.V. del., M.R. lith.

Veronica serpyllifolia L.

PLATE 47.

VERONICA SERPYLLIFOLIA.

Family, SCROPHULARIACEÆ :—Petals united. Ovary superior. Stamens epipetalous, 2 or 4, if 4 in pairs. Ovary 2-celled. Flowers irregular.

Genus, VERONICA (*Speedwell*) :—Herbaceous plants, seldom shrubs. Leaves opposite. Flowers blue or white. Corolla rotate, deeply and unequally 4-lobed, the lower lobe being the narrowest. Stamens 2, projecting from the corolla. Fruit a capsule with few seeds.

Veronica serpyllifolia, *Linn.* (Thyme-leaved Speedwell.) Plant about 2–5 in. high. Stem partially creeping, the flowering branches erect. Leaves ovate, up to $\frac{1}{2}$ in. long, with rounded apices and crenate margins. Leaf stalk very short or absent. Flowers arranged in terminal spikes, pale blue, striped with dark blue veins. Capsule inversely heart-shaped with a long, persistent style.

Abundant near settlements, but probably introduced.

Description of plate :—1, whole plant ; 2, flower ; 3, section of flower ; 4, calyx and pistil ; 5 and 6, stamens ; 7, pistil ; 8, fruit ; 9, section of fruit. All except 1 enlarged.





E.F.V. del., M.R. lith.

Veronica elliptica, Forst.

PLATE 48.

VERONICA ELLIPTICA.

Family, SCROPHULARIACEÆ:—Petals united. Ovary superior. Stamens epipetalous, 2 or 4, if 4 in pairs. Ovary 2-celled. Flowers irregular.

Genus, VERONICA:—Herbaceous plants, seldom shrubs. Leaves opposite. Flowers blue or white. Corolla rotate, deeply and unequally 4-lobed, the lower lobe being the narrowest. Stamens 2, projecting from the corolla. Fruit a capsule with few seeds.

Veronica elliptica, *Forst.* ("Box.") Plant a smooth shrub, attaining a height of 5–7 ft., and being the tallest plant of the Islands. Leaves opposite, in pairs, the pairs alternating with one another, about $\frac{3}{4}$ in. long, oval, with very pointed apices and short stalks, margin entire, shining. Flowers crowded towards the top of the branches, with a delightful and fragrant scent of orange blossom. Calyx of 4 oval-pointed, slightly hairy segments. Corolla white or flesh-coloured, streaked with blue. Stamens 2. Anthers purple. Filaments white. Stigma yellowish-green. Capsule broadly ovate. Seeds flat.

Seashores. Fairly common.

Flowers January and February.

West Falklands.

Description of plate:—1, portion of plant in flower; 2, flower; 3, section of flower; 4, calyx and pistil; 5 and 6, stamens; 7, dehiscing anther; 8, portion of plant in fruit; 9, fruit; 10, section of fruit; 11, seed. All except 1 and 8 enlarged.





F. V. del. M. R. lith.

Polygonum maritimum, L. var. *chilense*, Koch.

PLATE 49.

POLYGONUM MARITIMUM, VAR. CHILENSE.

Family, POLYGONACEÆ :—Flowers incomplete, perianth of one whorl. Plants characterised by peculiar sheathing stipule clasping the stem.

Genus, POLYGONUM :—Herbaceous plants, sometimes prostrate. Stem often enlarged and bent at joints. Leaves alternate, stipules scaly and sheathing the stem, often fringed. Flowers in axils of upper leaves or in spikes, small, pale green or red. Perianth deeply 5-cleft, segments sometimes unequal. Stamens 5–8. Anthers attached at the middle and swinging. Styles 2–3. Fruit not winged.

Polygonum maritimum, L., var. chilense, Koch. Plant smooth, up to $1\frac{1}{2}$ ft. in height, often spreading and much branched. Leaves narrowly oblong, not stalked, fleshy, tinged with red. Sheaths with oblong lobes, at length lacerate, about half as long as the leaves. Flowers small, in threes, axillary, long-stalked. Corolla bell-shaped, greenish-white. Stamens 5. Filaments flattened at the base. Style 3-lobed. Stigma capitate. Ovary reddish. Nutlet red, smooth and shining.

Seashore. Rare.

West Falklands.

Description of plate :—1, portion of plant ; 2, flower ; 3, section of flower ; 4 and 5, stamens ; 6, pistil ; 7 and 8, fruit. All except 1 enlarged.



E.F.V. del. M.R. lith

Chenopodium macrospermum, Hook f

PLATE 50.

CHENOPODIUM MACROSPERMUM.

Family, CHENOPODIACEÆ:—Flowers incomplete, perianth of one whorl, small. Stamens opposite lobes. Ovary 1-celled with 1 ovule but 2 or more styles. No stipules.

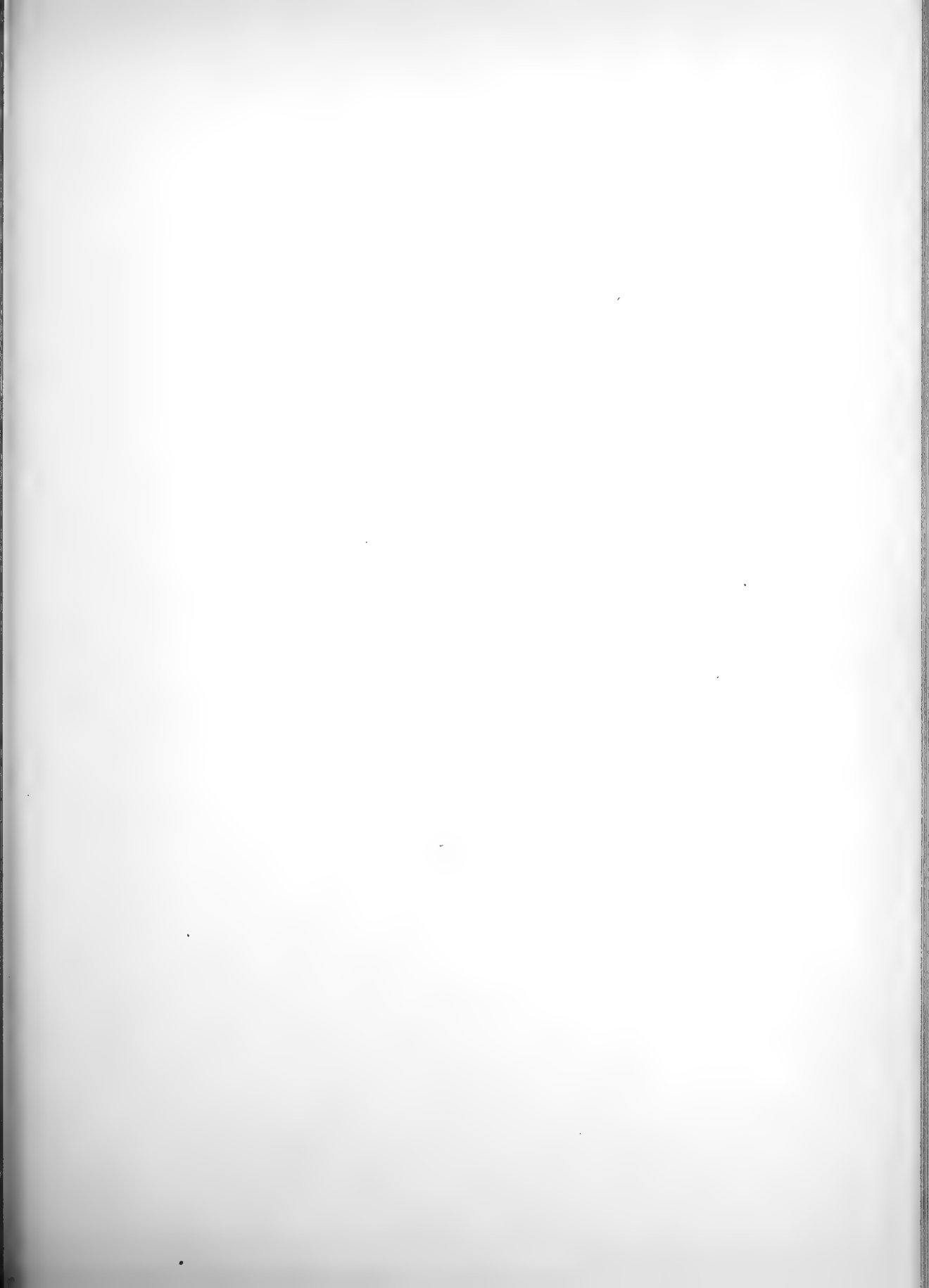
Genus, CHENOPODIUM (*Goosefoot*):—Herbaceous, very variable plants. Stem angular. Leaves alternate, flat, often triangular, entire or lobed. Flowers small, green, in axillary clusters or forming terminal inflorescences. Perianth of 5 equal segments, remaining unaltered and closing over fruit. Stamens 2-5. Stigmas 2-3.

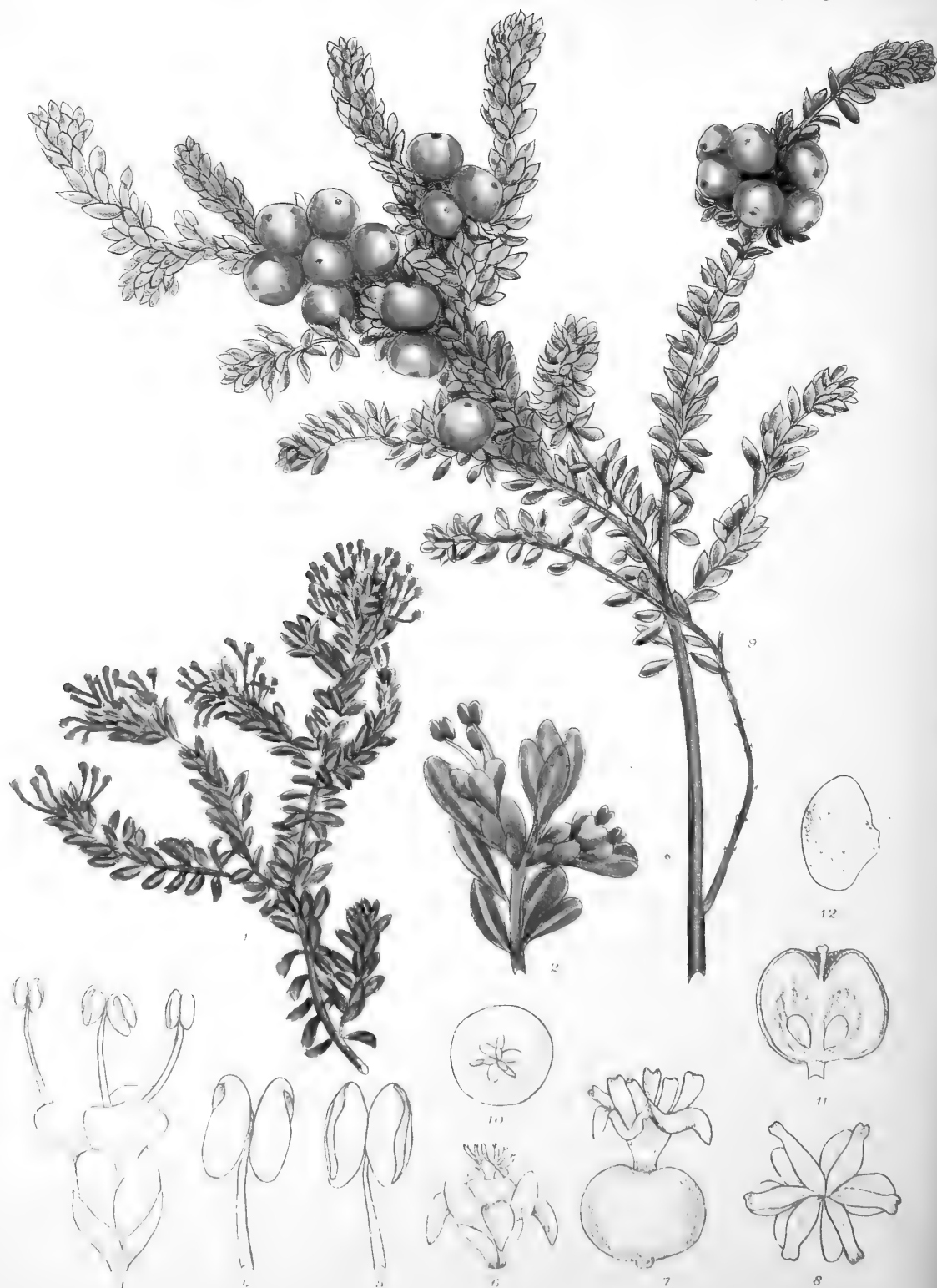
Chenopodium macrospermum, *Hook. fil.* Plant about 9 in. high, smooth. Stem rather thick and succulent, branched at the base. Leaves stalked, $\frac{1}{2}$ -2 in. long, fleshy, oblong or somewhat triangular in shape, tapering to a narrow base, apex rounded. Flowers arranged in a dense inflorescence with bracts. Seeds large or reticulately marked, reddish.

Seashores. Rare.

East and West Falklands.

Description of plate:—1, whole plant; 2 and 3, fruit; 4, seed. All except 1 enlarged.





FFV.del. MR lith

Empetrum rubrum, Vahl.

PLATE 51.

EMPETRUM RUBRUM.

Family, EMPETRACEÆ:—Flowers incomplete, perianth of one whorl, unisexual. Sepals, petals and stamens 3.

Genus, EMPETRUM:—Small, evergreen, heath-like shrubs. Leaves scattered. Flower scales overlapping. Male and female flowers on different plants. Petals 3, purplish-red. Stamens 3. Stigma lobed and radiating, with 6-9 rays, lobes truncate, lacinate or incised. Fruit a black or red fleshy, spherical drupe, having 6-9 1-seeded chambers.

Empetrum rubrum, *Vahl*. (“Red Crowberry.” Vernacular name in Falkland Islands, “Diddle-dee.”) Plant much branched, procumbent. Leaves not stalked, crowded, narrow, blunt, about $\frac{1}{4}$ in. long, margins turned back, hairy, lower ones reddish, upper bright green. Flowers in axils of upper leaves, solitary. Male flower:—Sepals yellowish-green with red tips. Petals crimson. Anthers and filaments crimson, the latter long. Female flower:—Sepals yellow. Petals crimson, darker than in the male flower. Ovary green, 9-celled. Stigma dark purple, with 9 rays. Drupe red, taste bitter, resembling that of a cranberry.

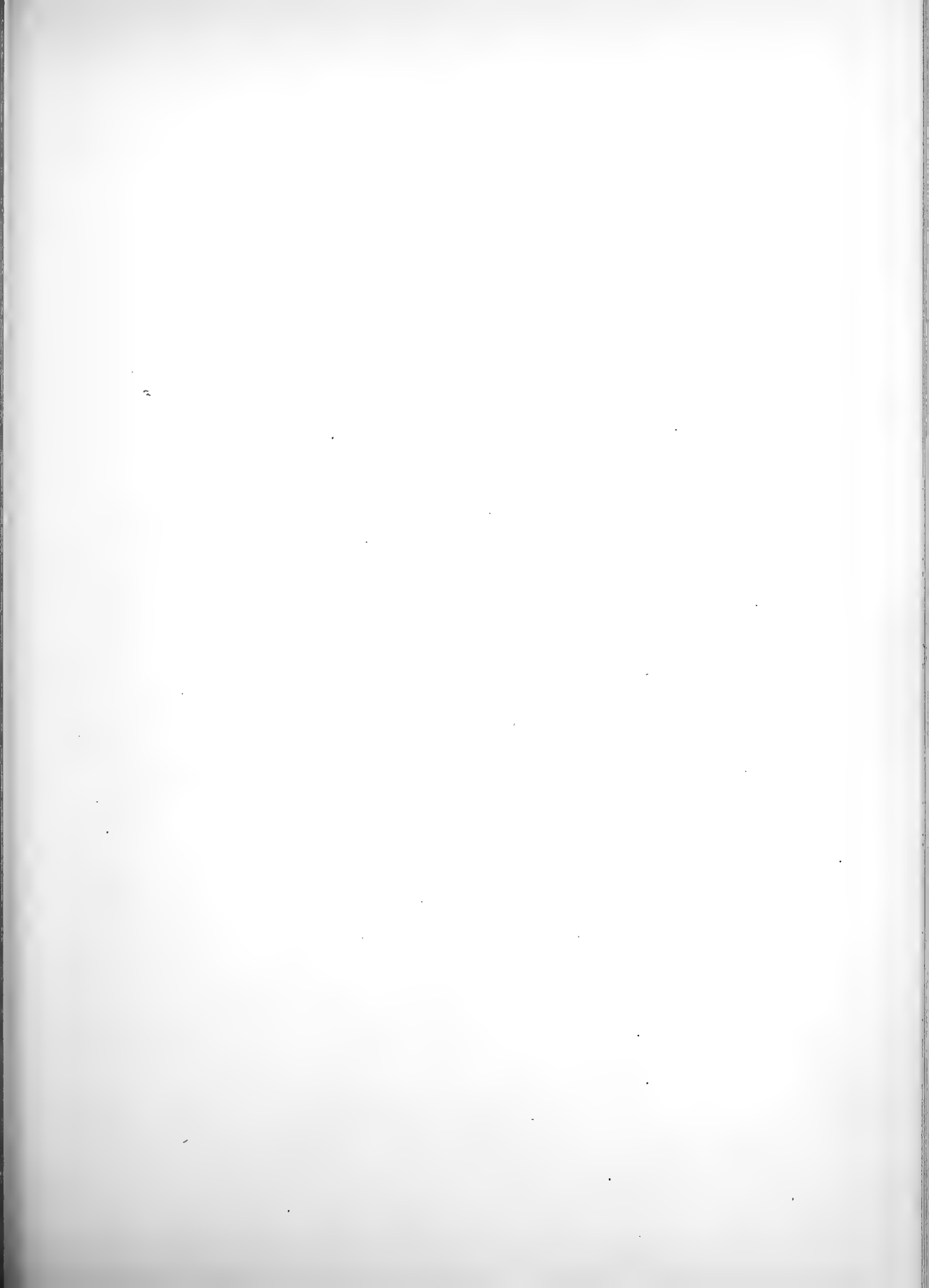
Very common in the heath at all altitudes. “Covers miles of country as heather does on English moorlands” (Wright).

Flowers October.

The fruit is eaten in Arctic regions, being considered to have tonic properties, while the dried twigs make excellent fuel.

Description of plate:—1 and 2, portion of plant in flower; 3, male flower; 4 and 5, stamens; 6, female flower; 7, pistil; 8, stigma seen from above; 9, portion of plant in fruit; 10, fruit; 11, section of fruit; 12, seed. All except 1 and 9 enlarged.







L.F.V. del. M.R. hch

Nanodea muscosa, Gaertn. f.

PLATE 52.

NANODEA MUSCOSA.

Family, SANTALACEÆ:—Flowers incomplete, perianth of one whorl, sometimes unisexual. Perianth valvate. Ovary inferior, 1-celled, with 1-3 ovules.

Genus, NANODEA:—Low, moss-like, branched. Leaves alternate, narrow. Flowers usually solitary among the leaves, small, not stalked. Perianth 4-lobed, attached to the ovary, valvate. Stamens 4. Anthers ovate, filaments short and fleshy. Disc concave. Stigma short, 2-lobed. Style short, conical. Ovary inferior, 1-celled. Ovules 2. Fruit a solitary, globose drupe. Seeds 1 in each ovary.

Nanodea muscosa, Gaertn. f. Plant about 3 in. high. Leaves $\frac{1}{4}$ – $\frac{3}{4}$ in. long, very narrow, mainly situated towards the top of the branches. Flower yellowish-white tinged with red. Anthers yellow, filaments green. Stigma red. Fruit red.

Very common on Empetrum heaths.

Flowers January.

East and West Falklands.

As is usual in this family, the plant has been proved by Skottsberg to be a parasite, growing on the roots of Empetrum, Pernettya, and other plants of Nanodea.

Description of plate:—1, plant in flower; 2 and 3, flower; 4, section of flower; 5, stamens; 6, style and stigma; 7, portion of plant in fruit; 8, fruit; 9, section of fruit. All except 1 and 7 enlarged.





PLATE 53.

CODONORCHIS LESSONII.

Natural Order, ORCHIDACEÆ :—Nerves of the leaf usually more or less parallel. Parts of the flower usually in multiples of 3. Perianth very irregular. Anther 2-celled, combined with the style in an axial column.

Genus, CODONORCHIS :—Rhizome tuberous. Stem with 3–6 leaves in a whorl, at or above the middle of the stem, 1-flowered. Leaves broad, with very short or practically no stalks. Sepals equal, free. Petals longer than sepals, labellum free, spurless, 3-lobed or undivided, having peculiar glands. Fruit an oblong or oval capsule.

Codonorchis Lessonii, (*d'Urv.*) *Lindl.* Plant about 6 in. high. Leaves usually 3 in a whorl, occasionally 2 or 4, with short stalks, broadly ovate, entire, apex more or less rounded. Flower about $1\frac{1}{2}$ in. across, but varies considerably, white marked with purple, scented.

Meadow and heath. Not uncommon, but always local. It may be very plentiful one season and not a single plant to be found the next.

Flowers November and December.

East and West Falklands.

Description of plate :—1, whole plant ; 2, lip. Fig. 2 enlarged.







E.F.V. del., M.B. lith.

Chloraea Gaudichaudii, Brongn.

PLATE 54.

CHLORÆA GAUDICHAUDII.

Family, ORCHIDACEÆ:—Nerves of the leaf usually more or less parallel. Parts of the flower usually in multiples of 3. Perianth very irregular. Anthers 2-celled, combined with the style in an axial column.

Genus, CHLORÆA:—Rhizome short, not numerous, roots fleshy. Stem simple and leafy. Leaves membranaceous. Flowers arranged in a terminal spike, not stalked. Sepals free, posterior sepal sometimes erect and arched. Petals narrow; labellum incurved. Anthers erect, 2-celled. Pollinia 2-parted, oblong. Capsule erect, ovoid.

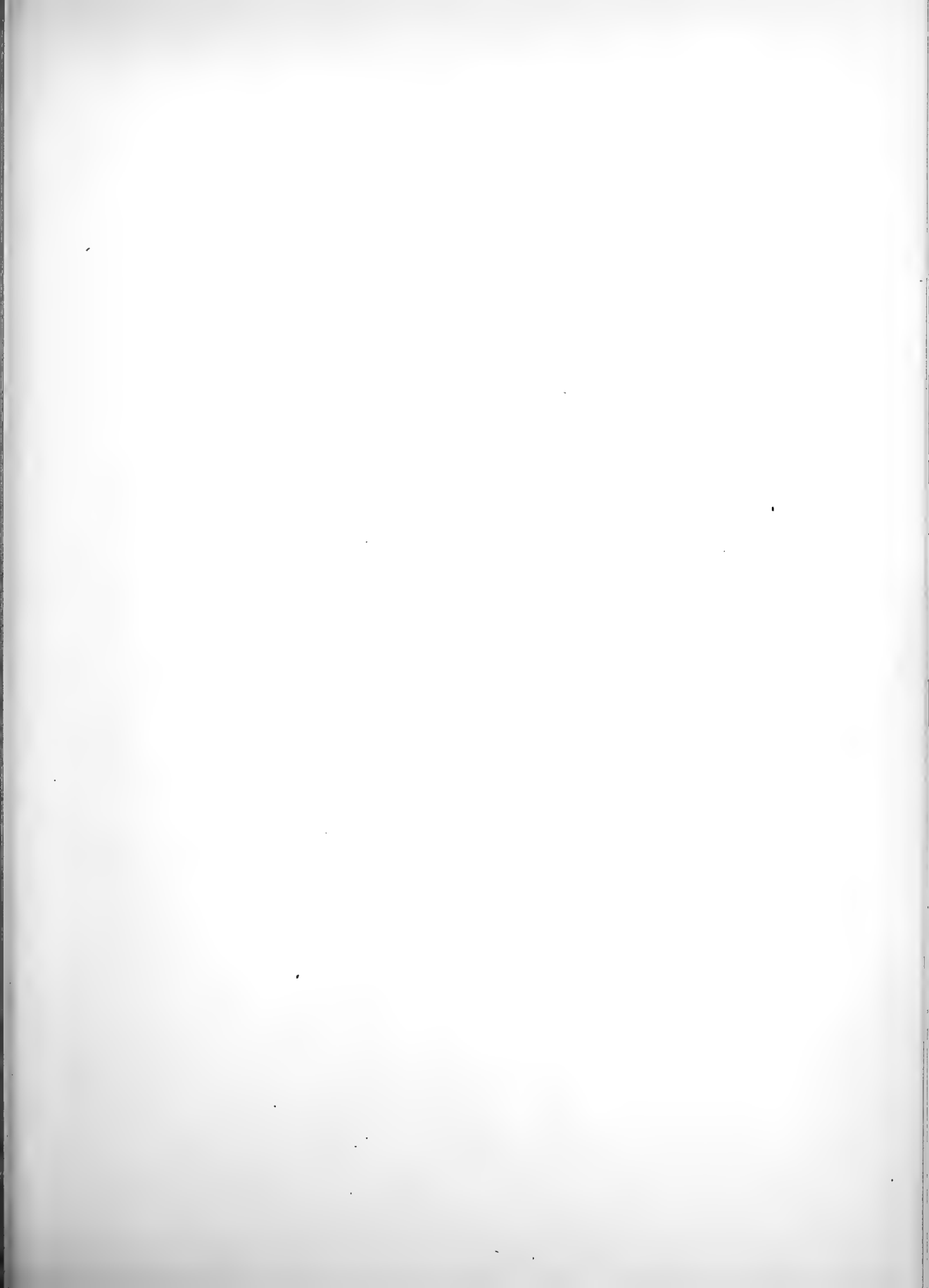
Chloræa Gaudichaudii, *Brongn.* Plant varies in size, average about 14 in. high. Leaves oblong, apex pointed, spotted. Bracts large. Flowers yellowish-green, lower portion of column red. Sepals narrowly ovate, membranaceous. Petals not all equal in length, apices rounded; labellum 3-lobed, lateral lobes fringed, middle lobe covered with green papillæ.

Moist places. Rare.

Flowers December and January.

East and West Falklands, and only found on these Islands.

Description of plate:—1, whole plant; 2, flower; 3, lip; 4 and 5, column; 6, pollen. All except 1 enlarged.





E. F. J. del., M. R. hdb.

Sisyrinchium filifolium, Gaud.

PLATE 55.

SISYRINCHIUM FILIFOLIUM.

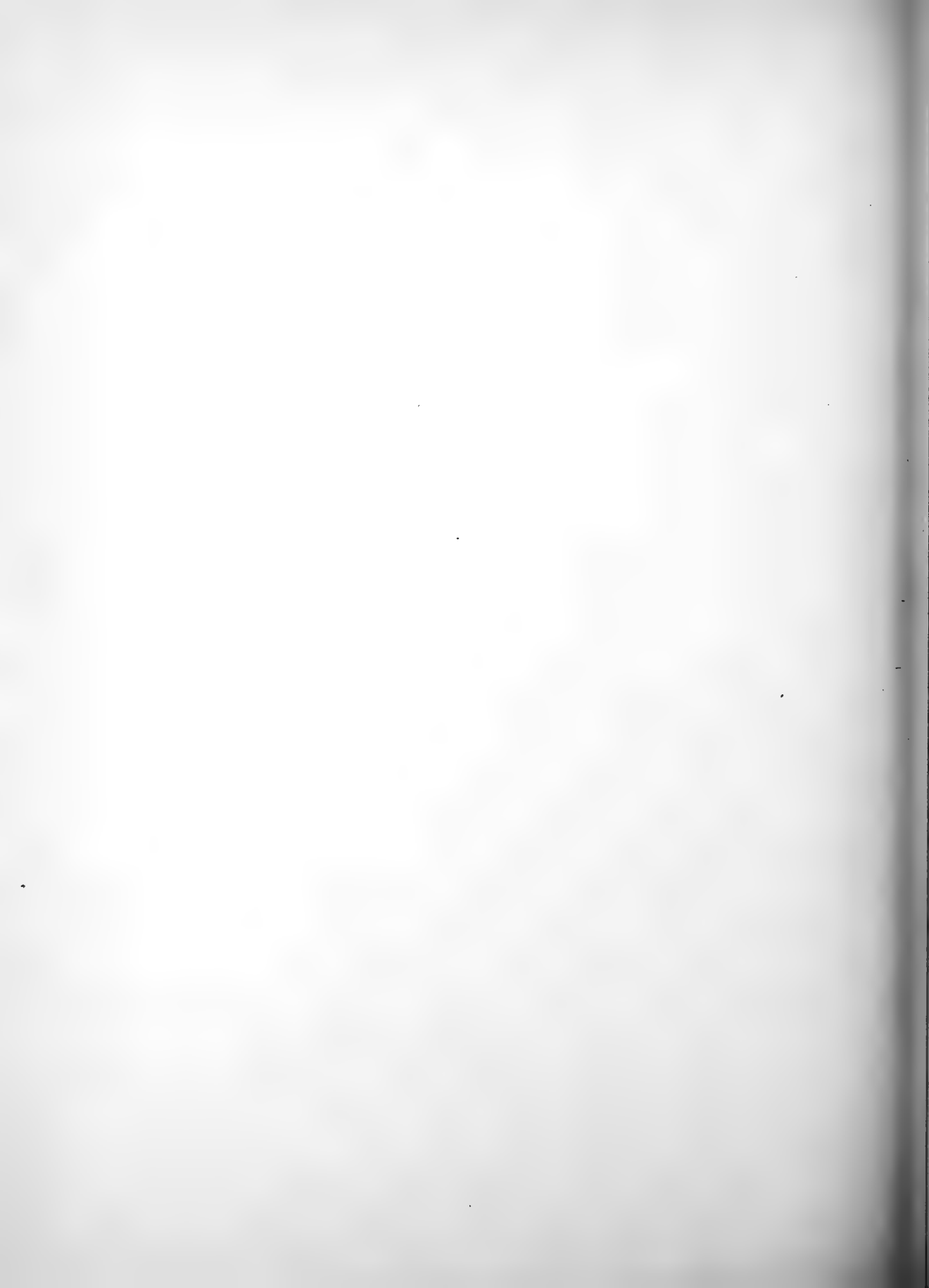
Family, IRIDÆ:—Nerves of the leaf usually more or less parallel. Parts of the flower usually in twos or threes. Perianth petaloid, united below into a tube. Stamens 3.

Genus, SISYRINCHIUM:—Roots springing from a short rhizome. Leaves narrow, springing from root or base of stem, very few from upper part of stem. Flowers on slender stalks surrounded by spathes. Perianth tube bell-shaped. Stamens fixed to the base of perianth. Anthers erect or swinging. Styles slender. Ovary 3-celled, with many ovules in each. Fruit a globose capsule, opening into 3 valves.

Sisyrinchium filifolium, *Gard.* ("Pale Maiden.") Plant slender, about 12 or 14 in. high. Stem round, leafy at base. Leaves few, very narrow, pointed. Spathe 2-5 in. long. Flowers in a terminal cluster of 2-8, about 1 in. across, bell-shaped, scented. Perianth segments white with purplish veins. Filaments united at base. Styles 3, slender. Capsule orange-brown, with 3-6 seeds in each cell.

Hooker says of this plant:—"One of the most abundant and elegant plants in the Falkland Islands, where the grassy plains are, in the spring month of November, almost whitened by the profusion of its pendulous, snowy bells."

Description of plate:—1, portion of plant; 2, perianth segment; 3, stamens and pistil; 4, stamen; 5, portion of plant in fruit; 6, section of fruit; 7, seed. All except 1 and 5 enlarged.







E.F.V. del. M.R. hdb

Callixene marginata, Lam.

PLATE 56.

CALLIXENE MARGINATA.

Family, LILIACEÆ :—Nerves of the leaf usually more or less parallel. Parts of the flower usually in twos or threes. Perianth regular. Ovary syncarpous, superior.

Genus, CALLIXENE :—Stem shrubby, branched, smooth. Leaves alternate, not stalked, with 3—many prominent veins. Flowers with slender stalks, solitary or few, in the axils of the leaves. Perianth segments distinct, spreading, spotted. Stamens 6, below the ovary. Anthers turning outwards. Style slender, fleshy. Stigma 3-lobed. Ovary 3-celled, many ovules. Berry globose. Seeds few.

Callixene marginata, *Lam.* A spreading or creeping plant, may attain a length of several feet. Stem reddish below. Leaves $\frac{1}{2}$ in. long, oblong or elliptical, thick at margins, tough. Flowers white and fragrant. Berry dark purple and poisonous.

Common on heaths, especially among stones.

Flowers November and December.

Description of plate :—1, portion of plant in flower ; 2, flower ; 3, petal and stamens ; 4, pistil ; 5, portion of plant in fruit ; 6, section of fruit ; 7, seed. All except 1 and 5 enlarged.





1. FV del. MR. lith

1 *Rostkonia grandiflora*, Hook. f.
2-5. *R. magellanica*, Hook. f.

PLATE 57.

FIG. 1.—*ROSTKOVIA GRANDIFLORA*.

FIGS. 2-5.—*ROSTKOVIA MAGELLANICA*.

Family, *JUNCAEAE* (*Rush*):—Nerves of the leaf parallel. Parts of the flower usually in twos or threes. Perianth stiff or calyx-like. Capsule 3-celled.

Genus, *ROSTKOVIA*:—A rush-like plant, with one narrow, terete leaf. Flower solitary and terminal. Bracts 1-3, scaly. Perianth segments distinct, narrow, erect, rigid. Stamens 6, below the ovary. Anthers erect, attached to filament at base, filament short. Style subulate, divided into 3 narrow stigmas. Ovary 1-celled. Capsule globose, ovoid or oblong, tough, divides into 3 valves. Seeds numerous, small.

***Rostkovia grandiflora*, Hook. f.** Plant about 12 in. high, rigid, branched. Culm with one radical leaf, sheathing at the base and terete. Sepals 6, narrow, awl-shaped, unequal in length, brownish, 3 bracts at base. Stamens shorter than the sepals, purple. Anthers oblong. Filaments short. Stigmas green. Capsule 1-celled, oblong with a pointed apex.

Abundant, thriving best in moist situations.

Flowers November.

East and West Falklands.

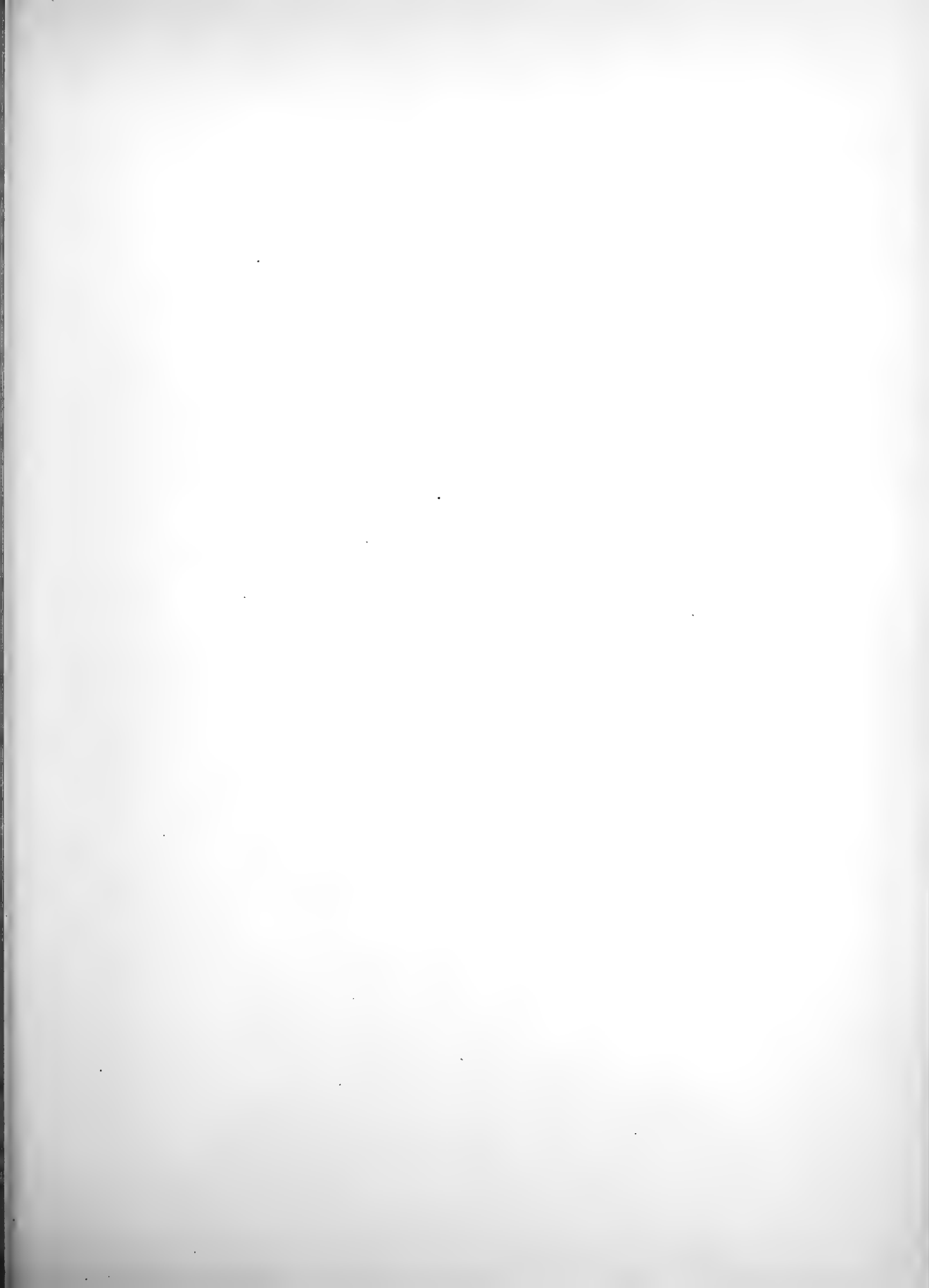
***Rostkovia magellanica*, Hook. f.** Plant about 8 in. high. Culm compressed. Leaves radical, flat, sheathing, longer than the stem. Flower subtended by 1 long bract. Perianth leaves not all equal, narrow, pointed.

Marshy ground. Common.

Flowers October.

East Falklands.

Description of plate:—1, *R. grandiflora*, plant and stock. 2-5, *R. magellanica*: 2, whole plant; 3, flower; 4, fruit; 5, seed. All except 1 and 2 enlarged.





L. V. G. B. R. H. H.

Juncus Scheuchzerioides, Gaud.

PLATE 58.

JUNCUS SCHEUCHZERIODES.

Family, JUNCACEÆ (*Rush*):—Nerves of the leaf parallel. Parts of the flower usually in twos or threes. Perianth stiff or calyx-like. Capsule 3-celled.

Genus, JUNCUS:—General character of the genus—Smooth, marsh plants, usually with a creeping rhizome. Leaves cylindrical. Flowers distinct or in little clusters. Perianth membranous. Stigmas 3. Stamens 6, rarely 3. Ovary 1-3-celled, with many ovules. Fruit a capsule with numerous seeds.

Juncus scheuchzerioides, *Gard.* Plant about 6 in. high. Rhizome long and jointed. Culm short, about 2 in. long. Leaves exceeding culm in length, sheathing, very narrow, jointed. Inflorescence of flowers terminal, with 2 bracts, 3-5 flowered. Perianth leaves equal, narrowly ovate, prolonged into a narrow point. Stamens 6, with long anthers. Styles 3, red. Ovary green. Capsule 3-lobed, pointed.

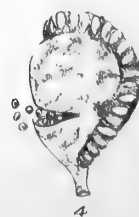
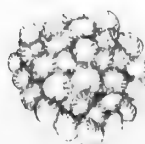
Very abundant, most common in sand drifts.

Flowers November and December.

East and West Falklands.

Description of plate :—1, portion of plant ; 2, flower ; 3 and 4, stamens ; 5, pistil ; 6, fruit ; 7, seed. All except 1 enlarged.





E.F.V. del, M.H. lith.

Cystopteris fragilis. Bernh.

PLATE 59.

CYSTOPTERIS FRAGILIS.

Class, FILICES :—Ferns, no true flowers.

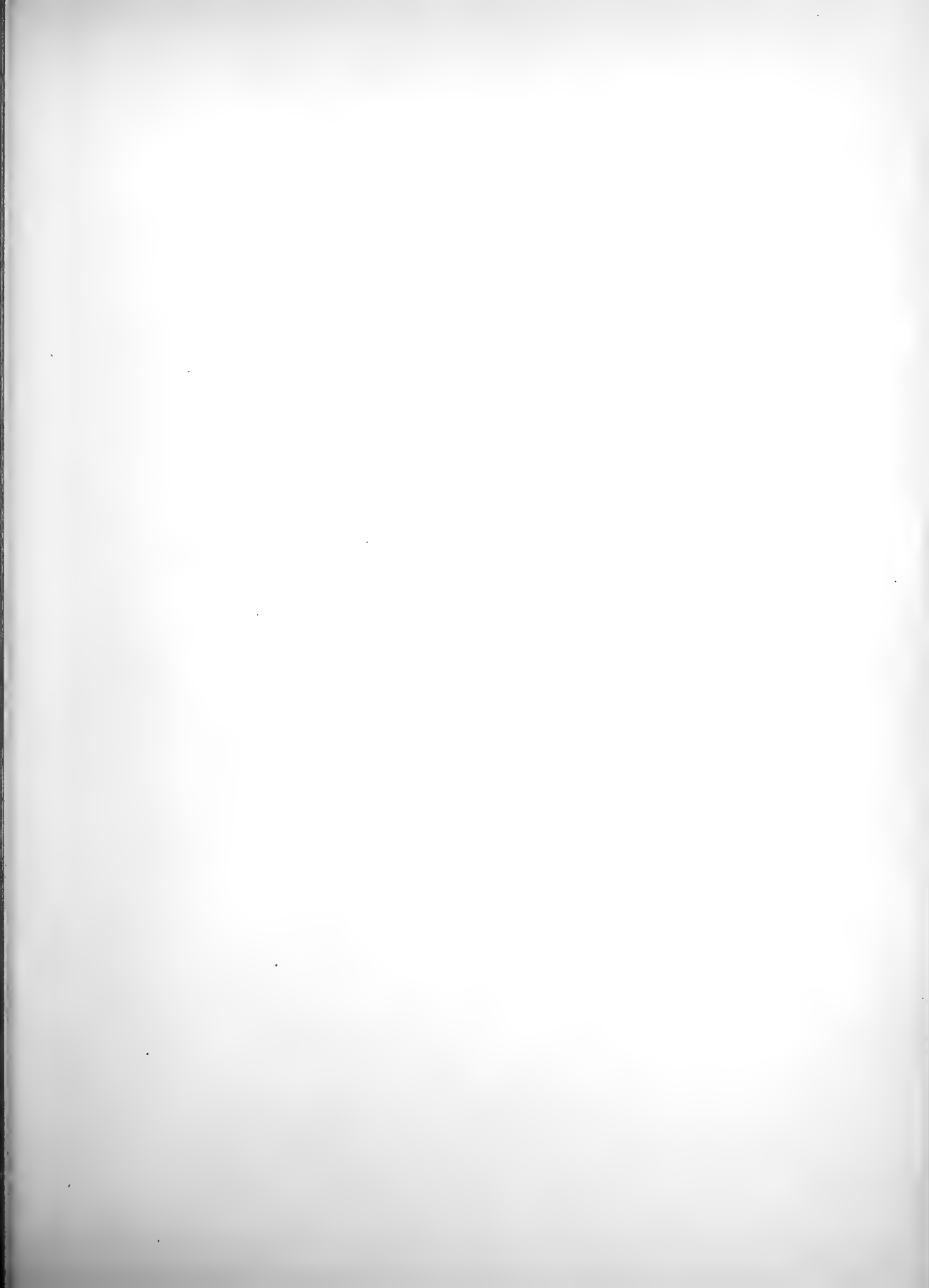
Genus, CYSTOPTERIS :—Fronds divided 2 or 3 times, thin in texture, flat. Sori round, placed on back of the veins. Indusium membranous, covering sorus like a hood.

Cystopteris fragilis, *Bernh.* Plant 4-12 in. high. Rhizome short. Frond 4-8 in. long, narrowly ovate, 3 times divided, segments toothed, largest leaflets $1-1\frac{1}{2}$ in. long, $\frac{1}{2}-\frac{3}{4}$ in. broad, soft in texture. Sori 2-12 to a segment.

Sheltered places among rocks and large stones.

West Falklands.

Description of plate :—1, fronds ; 2, portion of frond ; 3, sorus ; 4, sporangium dehiscing. All except 1 enlarged.





E.F.V. del., M.H. lith.

Polystichum adiantiforme, J.Sm.

PLATE 60.

POLYSTICHUM ADIANTIFORME.

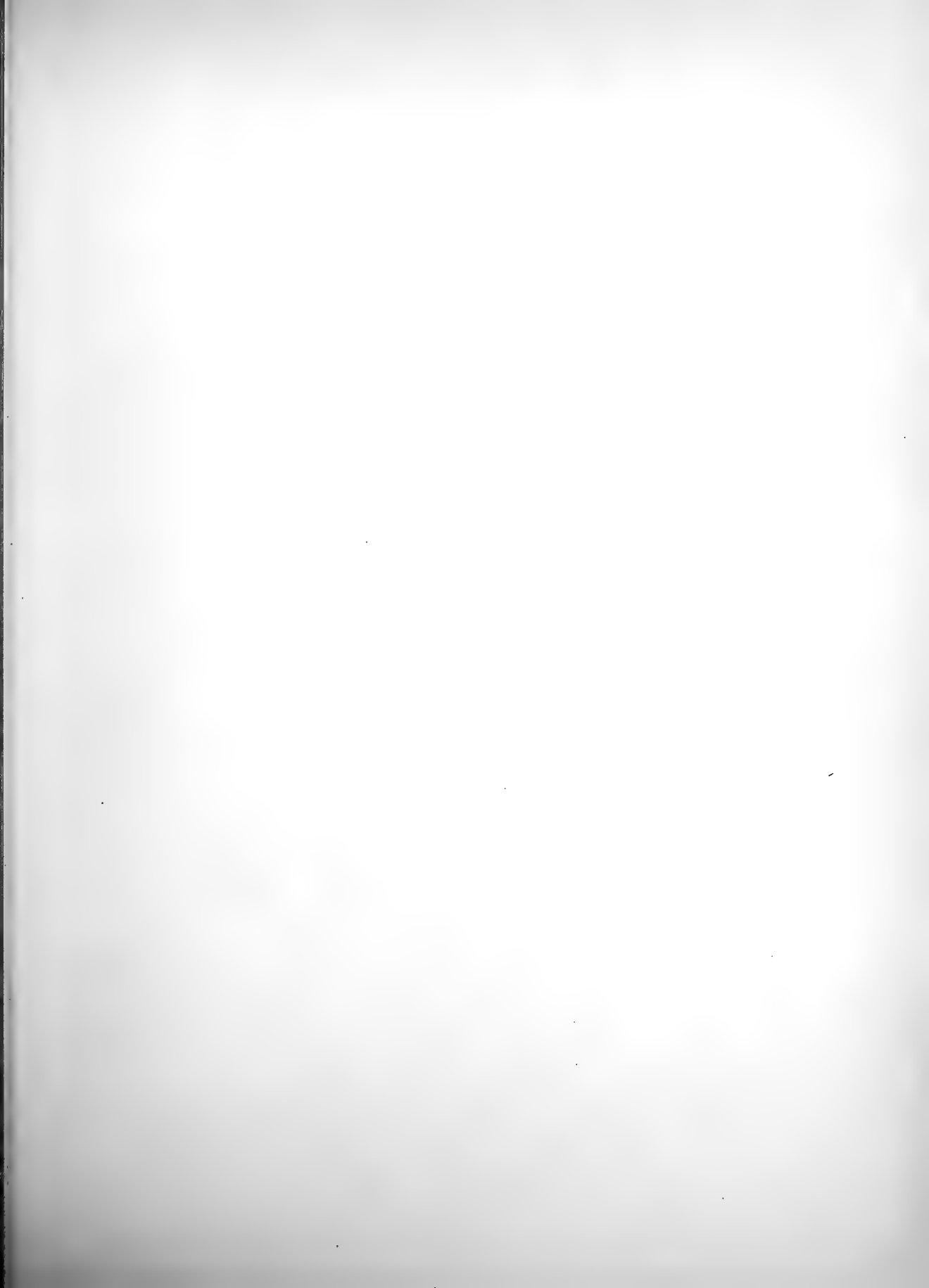
Class, FILICES :—Ferns, no true flowers.

Genus, POLYSTICHUM :—Fertile and sterile fronds similar. Veins all free, texture usually more or less coriaceous, segments toothed. Sori round, bursting transversely. Indusium heart- or kidney-shaped.

Polystichum adiantiforme, *J. Sm.* Plant up to 2 ft. high. Stem stout, shining, naked. Frond 2–12 in. long, roughly triangular in outline, brilliant glossy green, once divided, sometimes more in lower leaflets, leaflets and segments narrow, the former usually about 3 or 4 in. long and 2 in. broad, the latter blunt at apex. Sori $\frac{1}{2}$ in. broad, in 2 rows, filling nearly all space on leaf.

Sheltered creeks. Very rare.

West Falklands.





E.F.V. del., M.H. lith.

Polystichum mohrioides, Presl.

PLATE 61.

POLYSTICHUM MOHRIODES.

Class, FILICES :—Ferns, no true flowers.

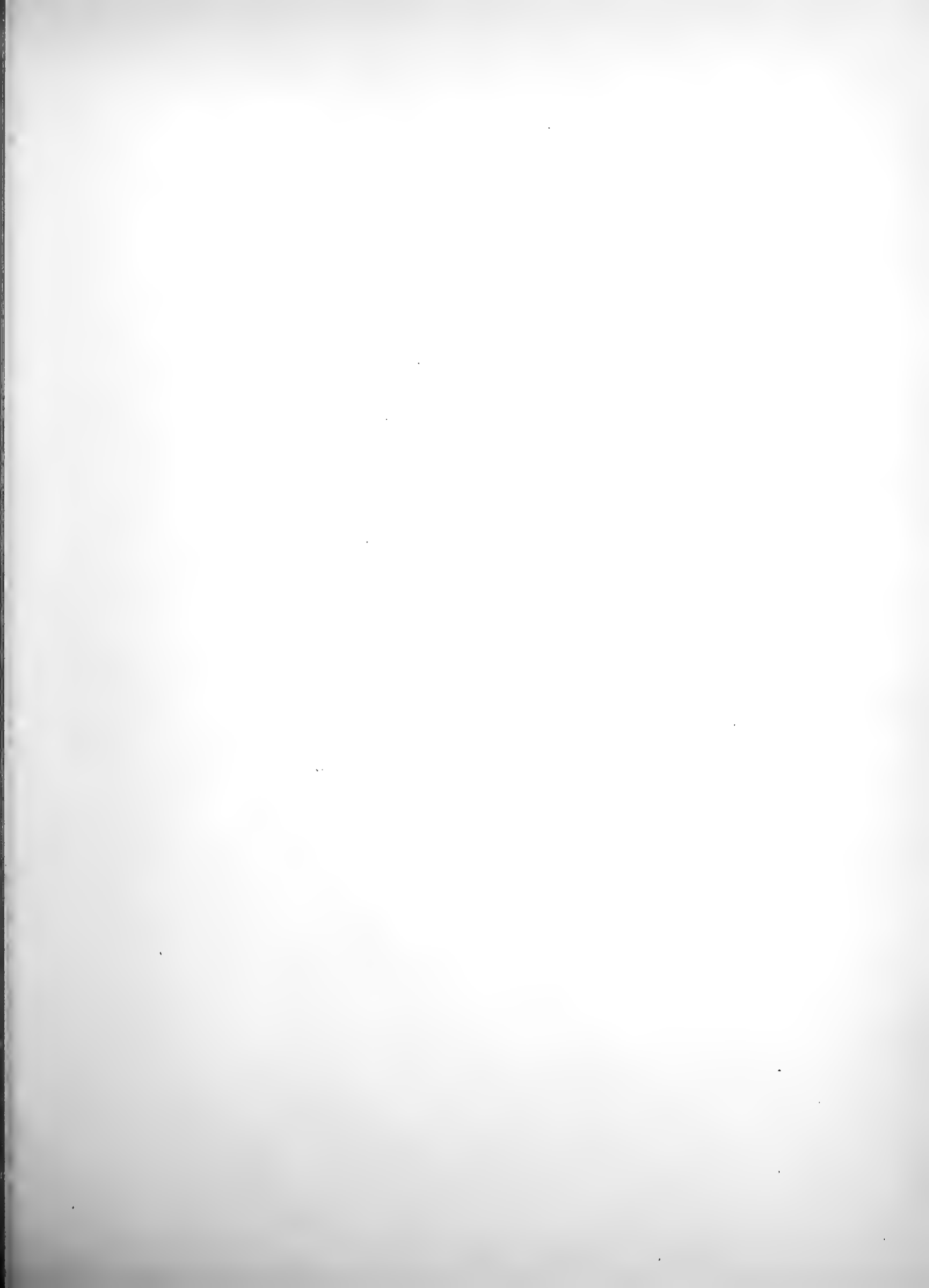
Genus, POLYSTICHUM :—Fertile and sterile fronds similar. Veins all free, texture usually more or less coriaceous, segments toothed. Sori round, bursting transversely. Indusium heart- or kidney-shaped.

Polystichum mohriodes, *Presl.* Plant about 12–14 in. high. Stem short, more or less covered with narrow, brown scales. Frond 5–9 in. long, $1\frac{1}{2}$ in. broad, once divided, twice below, segments rounded, slightly toothed. Sori numerous.

Rocky places. Not uncommon.

East and West Falklands.

Description of plate :—1, frond ; 2, section of stem ; 3, portion of frond ; 4 and 5, sporangia ; 6, spores. All except 1 enlarged.





E.F.V. del., M.R. lith.

Blechnum Penna-marina, Kuhn.

PLATE 62.

BLECHNUM PENNA-MARINA.

Class, FILICES :—Ferns, no true flowers.

Genus, BLECHNUM :—Fronds pinnate, barren and fertile fronds similar or differentiated. Veins usually free, forked. Sori in continuous lines, parallel to and usually contiguous with midrib. Indusium membranous, also continuous.

Blechnum Penna-marina, *Kuhn.* Plant 5–12 in. high. Rhizome slender, spreading, clothed with narrow, reddish-brown scales at crown. Stem naked. Frond somewhat tough. Barren frond 4–8 in. long, $\frac{1}{2}$ – $1\frac{1}{4}$ in. broad, narrowly lanceolate, leaflets rounded at apex and with a wide base. Fertile frond longer than barren, with smaller narrower leaflets, which are further apart.

Very common in heath, near streams and sea.

All over the Islands.

“ This species covers the ground for many yards ; its fronds come up ruddy in spring and gradually change to a dark, glossy-green ” (Wright).

Description of plate :—1, whole plant ; 2, section of stem ; 3, back of frond, showing sori ; 4, sporangia ; 5, sporangium dehiscing ; 6, prothallus and very young plant. All except 1 and 6 enlarged.







EFV del. MR lth

Blechnum tabulare, Kuhn.

PLATE 63.

BLECHNUM TABULARE.

Class, FILICES :—Ferns, no true flowers.

Genus, BLECHNUM :—Fronds pinnate, barren and fertile fronds similar or differentiated. Veins usually free, forked. Sori in continuous lines, parallel to and usually contiguous with midrib. Indusium membranaceous, also continuous.

Blechnum tabulare, *Kuhn*. Stem stout, woody, covered with very narrow, brown scales. Barren frond 7–14 in. long, 4–6 in. broad, leaflets 2–3 in. long, $\frac{1}{4}$ – $\frac{1}{2}$ in. broad, narrowing gradually to a point, sometimes lobed at the base, tough in texture. Fertile frond narrow, the leaflets smaller and closer. Indusium fimbriated.

Abundant in both Islands.

As in the former species, the young fronds come up bright red and colour the hillsides where they grow.

Description of plate :—1, mature frond ; 2 and 3, young plants ; 4, section of stem ; 5, back of frond, showing sori ; 6, sporangia. All except 1, 2 and 3 enlarged.





EF.V del., M.R. lith.

Gleichenia cryptocarpa, Hook.

PLATE 64.

GLEICHENIA CRYPTOCARPA.

Class, FILICES :—Ferns, no true flowers.

Genus, GLEICHENIA :—Rhizome creeping. Fronds usually branched in a forked manner. Sori small, indusium absent.

Gleichenia cryptocarpa, *Hook.* Plant about 12 in. high, smooth. Stem with a few yellowish-brown scales at the base. Frond tough, 4-5 in. long, 1 in. broad, segments narrow, margins turned back concealing the sori.

Heaths. Rare.

West Falklands.

Description of plate :—1, whole plant ; 2, section of stem ; 3 and 4, back of frond ; 5, sporangium. All except 1 enlarged.



INDEX

	PLATE		PLATE
ACENA ascendens	17	Draba funiculosa	8
— lucida	18	Drosera uniflora	18
Anagallis alternifolia	42	Droseraceæ	18
Arabis Macloviana	7	EMPETRACEÆ	51
Armeria Macloviana	43	Empetrum rubrum	51
Aster Vahlîi	31	Ericaceæ	30-40
Azorella cæspitosa	22	Erigeron incertus	34
— filamentosa	21	Euphrasia antarctica	45
— ranunculus	22	Eye-bright	45
BACCHARIS magellanica	35	FERNS	59-64
Bittercress	8	Filices	59-64
Blechnum Penna-marina	62	Fleabane	34
— tabulare	63	GALIUM antarcticum	25
Bramble	16	Gaultheria microphylla	40
Buttercup	1-4	Gentian	44
CALCEOLARIA Darwinii	45	Gentiana magellanica	44
— Fothergillii	46	Gentianaceæ	44
Callixene marginata	56	Geraniaceæ	15
Caltha sagittata	6	Gleichenia cryptocarpa	64
Campanulaceæ	38	Gnaphalium affine	31
Cardamine hirsuta	8	— purpureum	32
Caryophyllaceæ	12-14	Gunnera magellanica	19
Cerastium avense	14	Goosefoot	50
Chenopodium macrospermum	50	HALORAGACEÆ	19
Chenopodiaceæ	50	Hamadryas argentea	5
Chickweed	14	IRIDACEÆ	55
Chloræa Gaudichaudii	54	JUNCACEÆ	57-58
Chiliotrichum diffusum	33	Juncus scheuchzerioides	58
Cochlearia officinalis	9	LEUCERIA gossypina	36
Codonorchis Lessonii	53	Liliaceæ	56
Compositæ	27-37	MOUSE-EAR chickweed	14
Crantzia	23	Myrtaceæ	20
Crassulaceæ	21		
Crowfoot	1-4		
Cruciferae	7-10		
Cystopteris fragilis	59		
DRABA falklandica	10		

	PLATE		PLATE
<i>Myrteola nummularia</i>	20	<i>Rubus geoides</i>	16
<i>NANODEA muscosa</i>	52	<i>Rush</i>	57-58
<i>Nassauvia Gaudichaudii</i>	27	SANDSPURREY	13
— <i>serpens</i>	27	Santalaceæ	52
<i>Nertera depressa</i>	24	Scrophulariaceæ	45-48
ORCHIDACEÆ	53-54	Scurvy grass	9
<i>Oxalis enneaphylla</i>	15	<i>Senecio candicans</i>	30
PALE maiden	55	— <i>falklandicus</i>	28
<i>Perezia recurvata</i>	37	— <i>littoralis</i>	29
<i>Pernettya pumila</i>	39	<i>Sisyrinchium filifolium</i>	55
<i>Pimpernel</i>	42	<i>Sorrel</i>	15
Plumbaginaceæ	43	<i>Speedwell</i>	47-48
Polygonaceæ	49	<i>Spergularia media</i>	13
<i>Polygonum maritimum</i>	49	<i>Starwort</i>	12
<i>Polystichum adiantiforme</i>	60	<i>Stellaria media</i>	12
— <i>mohrioides</i>	61	<i>Stitchwort</i>	12
<i>Pratia repens</i>	38	<i>Sundew</i>	18
<i>Primula farinosa</i>	41	THRIFT	43
Primulaceæ	41-42	<i>Tillæa moschata</i>	21
RANUNCULACEÆ	1-6	UMBELLIFERÆ	21-23
<i>Ranunculus bitermatus</i>	1	VALERIANA sedifolia	26
— <i>hydrophilus</i>	3	Valerianaceæ	26
— <i>Maclovianus</i>	2	<i>Veronica elliptica</i>	48
— <i>trullifolius</i>	4	— <i>serpyllifolia</i>	47
<i>Rockcress</i>	7	<i>Viola maculata</i>	11
Rosaceæ	16-18	Violaceæ	11
<i>Rostkovia grandiflora</i>	57	<i>Violet</i>	11
— <i>magellanica</i>	57	WOOD sorrel	15
Rubiaceæ	24-25		

